

- 1. Our algorithm is able to discover relevant news articles in association with the given stock time series GOOG (Google company).**
- 2. The algorithm is completely data-driven as it was trained purely based on the general news collected from Thomson Reuters along with a stock price time series under interesting. Neither company name nor pre-selected news articles have been used in training.**
- 3. Following demonstrates its performance on the testing dataset, i.e., year 2013 when there is at least one groundtruth news article (for evaluation).**
- 4. First column show the news index, 2nd column show the attention mass associated with each news headlines shown in 3rd column. Higher attention mass imply more relevant news associated with the time series**

```
In [4]: import os, sys
        from imp import reload
        from os.path import dirname
        homePath = dirname(os.getcwd())
        utilPath = dirname(dirname(dirname(os.getcwd()))) + '/proj/utils/'

        sys.path.insert(0,homePath)
        sys.path: sys.path.insert(0,utilPath)

        import seaborn as sb
        sb.set_style('darkgrid')

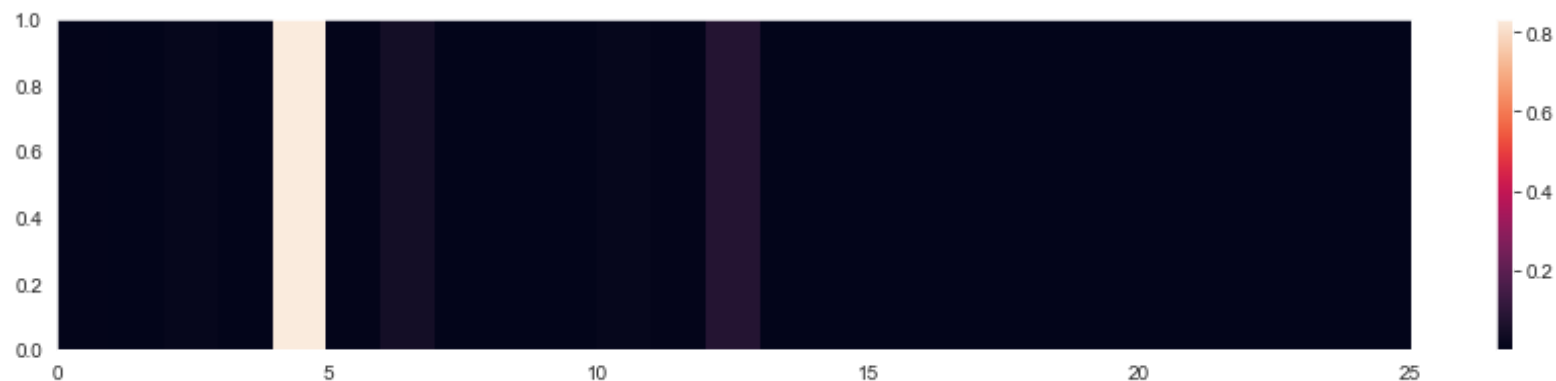
        import reuter_model as rm

        rm.prediction(model='MSIN',ticker='GOOG',test_data=True)
```

== Sample Idx = 500

Date: 2008-10-16

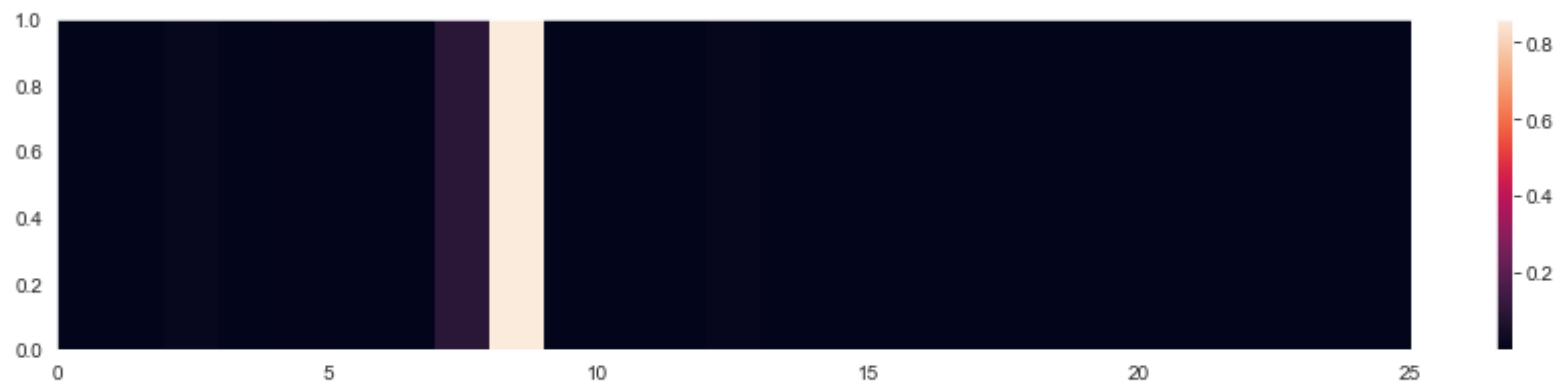
|    |      |  |   |
|----|------|--|---|
| 1  | 0.01 |  | google co-founder says penny-pinchers fuel results      |
| 2  | 0.00 |  | google grows worldwide and beats forecasts; shares rise |
| 3  | 0.01 |  | market ends sharply higher on bargain hunting and oil   |
| 4  | 0.00 |  | google defies economy to beat forecasts; shares rise    |
| 5  | 0.81 |  | instant view: google results beat expectations          |
| 6  | 0.01 |  | google co-founder says penny-pinchers fuel results      |
| 7  | 0.05 |  | google cfo: q3 strong across sectors and regions        |
| 8  | 0.00 |  | imf ready to help vulnerable emerging economies: paper  |
| 9  | 0.00 |  | instant view: housing starts slump in september         |
| 10 | 0.00 |  | instant view: housing starts slump in september         |
| 11 | 0.02 |  | instant view: consumer sentiment slumps in october      |
| 12 | 0.01 |  | consumers' mood suffers record drop in october: survey  |
| 13 | 0.07 |  | global stocks rally in volatile trade, money rates ease |
| 14 | 0.00 |  | housing market and consumers on the ropes               |
| 15 | 0.00 |  | housing market and consumers on the ropes               |
| 16 | 0.00 |  | buffett's "buy now" call gets lukewarm reception        |
| 17 | 0.00 |  | stocks eye earnings for economic clues                  |
| 18 | 0.00 |  | wall street slips as recession worries nag              |



== Sample Idx = 507

Date: 2008-10-27

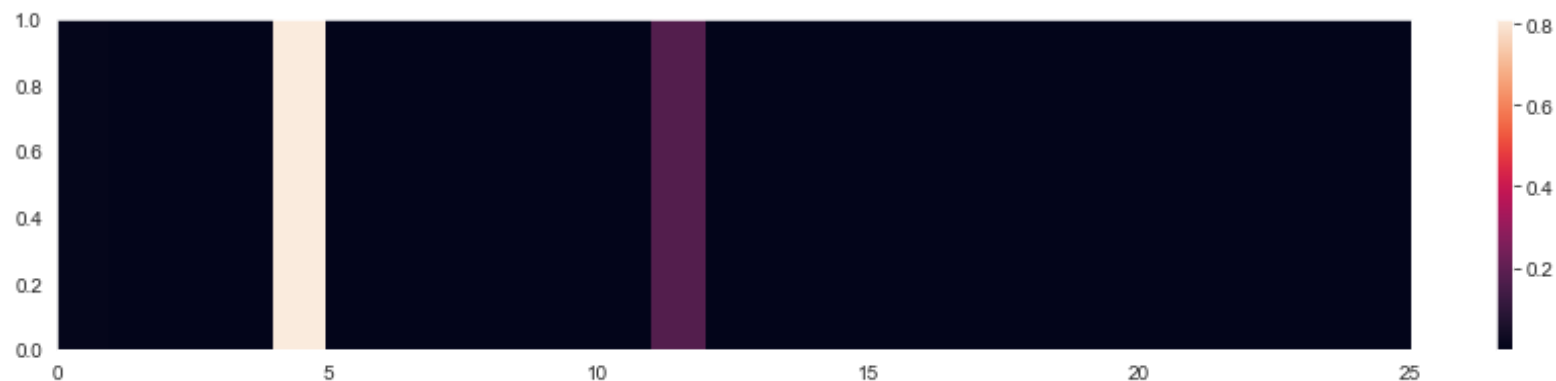
|    |      |   |
|----|------|---|
| 1  | 0.00 | oil falls \$1 to lowest since may 2007                      |
| 2  | 0.00 | wall street drops to 5-yr lows on economic fear             |
| 3  | 0.03 | instant view: single-family home prices plunge in september |
| 4  | 0.01 | instant view: single-family home prices plunge in sept      |
| 5  | 0.01 | google looking to invest in energy sector: report           |
| 6  | 0.01 | consumer confidence slumps to record low                    |
| 7  | 0.00 | goldman sachs, morgan stanley shares slide                  |
| 8  | 0.14 | home prices see record plunge                               |
| 9  | 0.77 | instant view: consumer confidence at record low             |
| 10 | 0.01 | lawmaker wants indepth review of google/yahoo deal          |
| 11 | 0.00 | oil dips below \$63 as faltering demand trumps opec         |
| 12 | 0.00 | japan may yet intervene, but don't expect miracles          |
| 13 | 0.03 | u.s. stocks soar in late-day rally, yen plummets            |



== Sample Idx = 508

Date: 2008-10-28

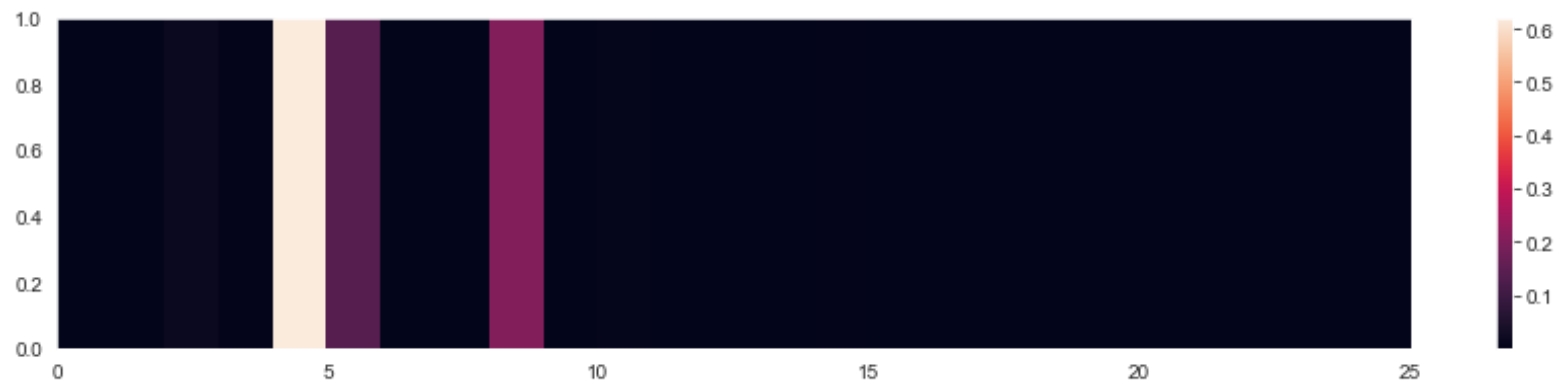
|    |  |      |  |  |
|----|--|------|--|--|
| 1  |  | 0.01 |  | wall street scores 2nd-best day ever on rate-cut hopes |
| 2  |  | 0.00 |  | consumers gloomiest ever as home prices plunge         |
| 3  |  | 0.00 |  | japan may yet intervene, but don't expect miracles     |
| 4  |  | 0.00 |  | instant view: bank of japan seen considering rate cut  |
| 5  |  | 0.81 |  | consumer group opposes google, yahoo partnership       |
| 6  |  | 0.00 |  | instant view: durable goods jump in september          |
| 7  |  | 0.00 |  | rate hopes and bargain hunting lift world stocks       |
| 8  |  | 0.00 |  | durable goods orders unexpectedly rise                 |
| 9  |  | 0.00 |  | instant view: fomc cuts target rate to 1 pct           |
| 10 |  | 0.00 |  | instant view: fomc cuts target rate to 1 pct           |
| 11 |  | 0.00 |  | instant view: fomc cuts target rate to 1 pct           |
| 12 |  | 0.17 |  | apple shares rally as analyst touts buyback            |
| 13 |  | 0.00 |  | oil up 7 percent on weak dollar, fed rate cut          |



== Sample Idx = 510

Date: 2008-10-30

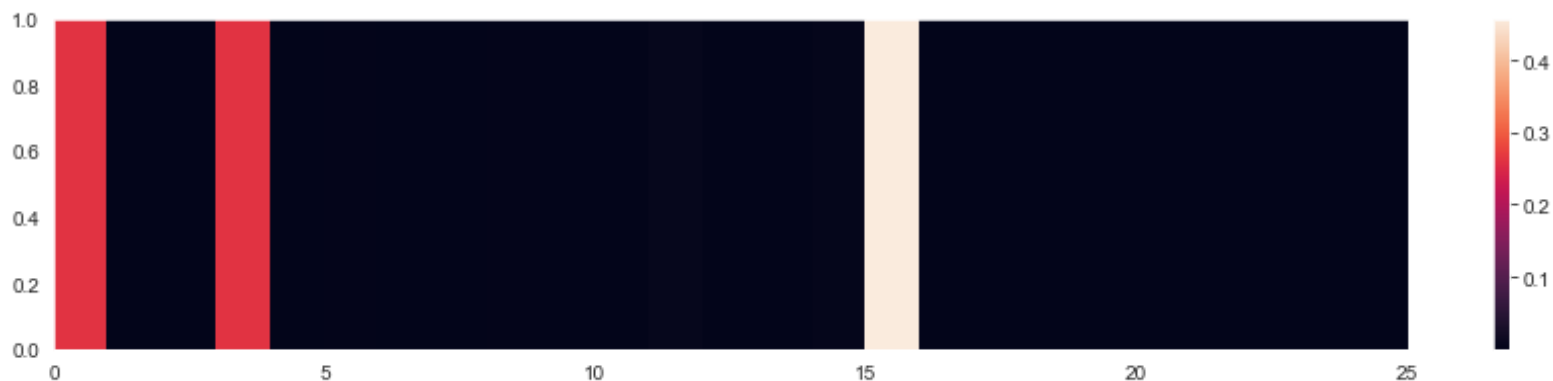
|    |      |   |
|----|------|---|
| 1  | 0.00 | economy contracts as consumers retreat                      |
| 2  | 0.00 | singapore employment growth slows in q3                     |
| 3  | 0.04 | world share prices set for worst month ever                 |
| 4  | 0.01 | consumers cut spending for first time in 2 years            |
| 5  | 0.53 | consumers' mood posts record drop                           |
| 6  | 0.16 | google may scrap yahoo deal: sources                        |
| 7  | 0.01 | oil drops 3 percent, set for record monthly slide           |
| 8  | 0.00 | stocks have most erratic month in 24 years                  |
| 9  | 0.21 | factbox: record misery for some in october                  |
| 10 | 0.00 | biotech ipos dying on the vine                              |
| 11 | 0.01 | instant view: fed's bernanke: must keep backing of gse debt |
| 12 | 0.00 | consumer spending drops as mood sours                       |
| 13 | 0.00 | bernanke comments aid "agency" debt                         |
| 14 | 0.01 | factbox: ten worst months for the dow and s&p 500           |
| 15 | 0.01 | ugly october ends with an upbeat day on wall st             |



== Sample Idx = 511

Date: 2008-10-31

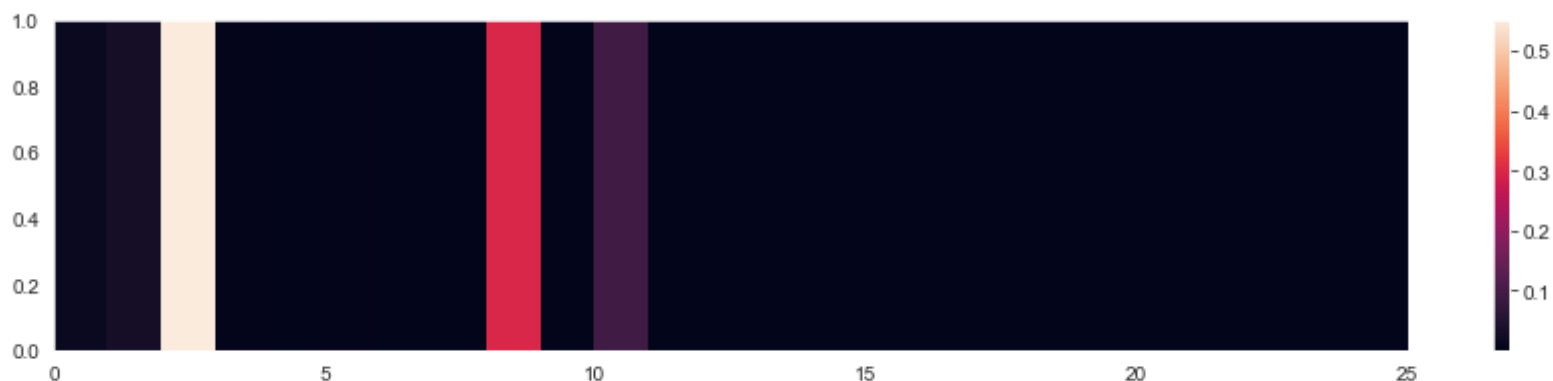
|    |      |  |
|----|------|--|
| 1  | 0.31 | election and jobs to set tone for stocks                   |
| 2  | 0.00 | china's wen says growth-inflation balance a long-term test |
| 3  | 0.01 | market woes overshadow u.s. election                       |
| 4  | 0.31 | election, jobs to set tone for stocks                      |
| 5  | 0.00 | grim australia economy news seen a rate cut clincher       |
| 6  | 0.01 | south korea unveils \$11 billion economy package           |
| 7  | 0.00 | all stimulus plans are not created equal                   |
| 8  | 0.00 | factbox: possible economic stimulus bills in congress      |
| 9  | 0.01 | instant view: factory activity shrinks in october          |
| 10 | 0.01 | ism: new manufacturing orders will take time to recover    |
| 11 | 0.00 | eu executive urges joint action, economy faces stall       |
| 12 | 0.02 | analyst says iphone production may be cut                  |
| 13 | 0.00 | oil drops near 6 percent on slumping demand                |
| 14 | 0.00 | manufacturing crash adds to global gloom                   |
| 15 | 0.01 | wall street ends barely changed day before election        |
| 16 | 0.32 | yahoo, google revise deal in hopes of approval: source     |



== Sample Idx = 512

Date: 2008-11-04

|    |      |  |
|----|------|--|
| 1  | 0.02 | senior apple executive to leave: report                |
| 2  | 0.06 | stock index futures rise ahead of election             |
| 3  | 0.51 | yahoo, google revise deal in hopes of approval: source |
| 4  | 0.01 | hungary dodges bullet, but seen slow to learn          |
| 5  | 0.00 | instant view: factory orders fall 2.5 percent in sept  |
| 6  | 0.01 | eu finmins back big reform agenda for g20 meeting      |
| 7  | 0.00 | factory orders tumble again                            |
| 8  | 0.00 | oil jumps 10 percent on saudi supply cuts              |
| 9  | 0.27 | yahoo-google deal may flounder, analyst says           |
| 10 | 0.00 | oil jumps, dollar slumps on u.s. election day          |
| 11 | 0.12 | wall street jumps in record election day rally         |

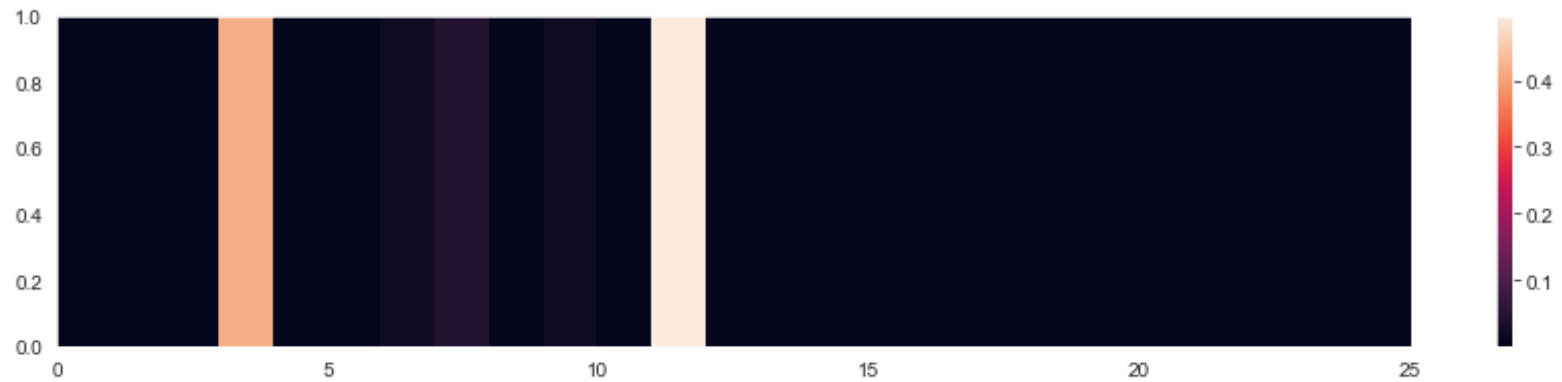


== Sample Idx = 513

Date: 2008-11-05

|    |      |   |
|----|------|---|
| 1  | 0.00 | how stock sectors could fare in an obama administration |
| 2  | 0.00 | scenarios: obama faces acute economic challenges        |
| 3  | 0.00 | planned layoffs jump to near five-year high             |
| 4  | 0.40 | google withdraws from search ad deal with yahoo         |
| 5  | 0.00 | instant view: services sector shrank sharply in october |
| 6  | 0.00 | grim jobs, services data greet new president            |
| 7  | 0.04 | google executives to face trial in italy: sources       |
| 8  | 0.07 | factbox: obama likely to name economic team soon        |
| 9  | 0.00 | will push for economic stimulus: pelosi                 |
| 10 | 0.04 | google executives to face trial in italy: sources       |
| 11 | 0.00 | oil falls 7 percent on u.s. demand drop, stock build    |
| 12 | 0.43 | google pulls out of search ad deal with yahoo           |
| 13 | 0.00 | market sinks on economic gloom as cisco warns late      |

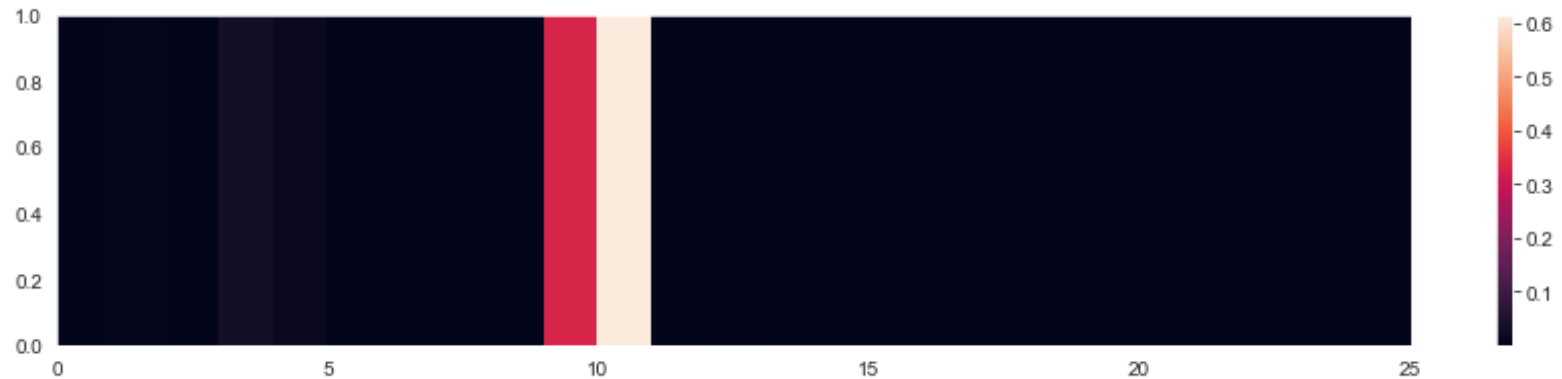




== Sample Idx = 518

Date: 2008-11-12

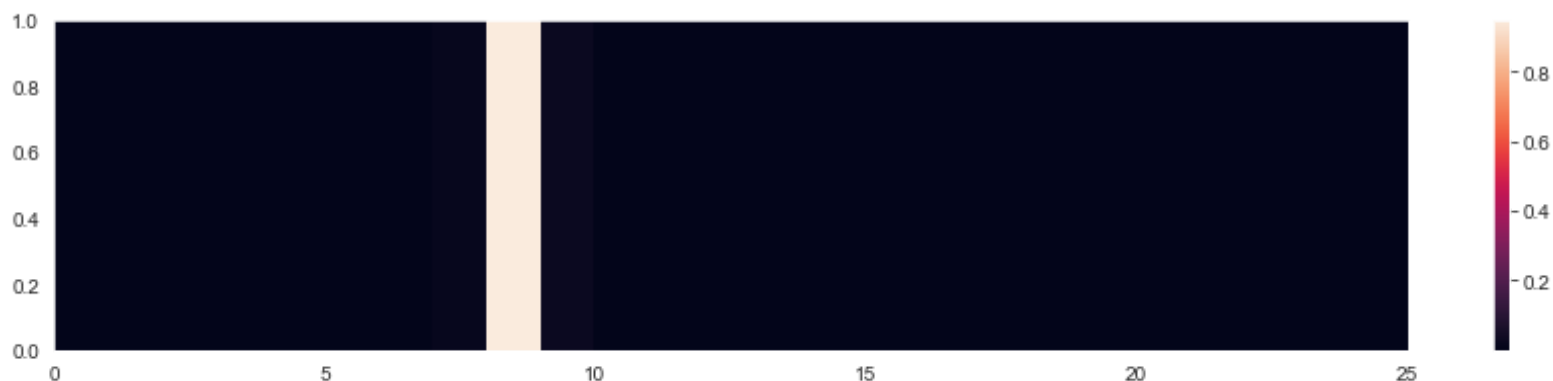
|    |      |   |
|----|------|---|
| 1  | 0.00 | oecd's gurria sees room for further rate cuts             |
| 2  | 0.03 | european shares tick higher                               |
| 3  | 0.00 | gm up as investors bet bailout is likely                  |
| 4  | 0.08 | home values drop for 7th straight quarter                 |
| 5  | 0.02 | instant view: treasury backs off plan to buy toxic assets |
| 6  | 0.00 | oil could rebound to \$100 a barre in a year: pickens     |
| 7  | 0.00 | boe signals uk rate cuts, unemployment rises sharply      |
| 8  | 0.00 | u.s. 2008 oil demand to drop most since 1980: eia         |
| 9  | 0.00 | web travel agencies feel pinch of weaker demand           |
| 10 | 0.32 | tech guru sees google defending ad market share           |
| 11 | 0.48 | google shares below \$300 for first time since 2005       |
| 12 | 0.00 | wall street skids on economic slump, intel falls          |
| 13 | 0.01 | technology shares slump after intel warning               |
| 14 | 0.00 | oecd's gurria sees room for further ecb rate cuts         |
| 15 | 0.00 | u.s. crude falls more than \$1 on economic fears          |



== Sample Idx = 525

Date: 2008-11-21

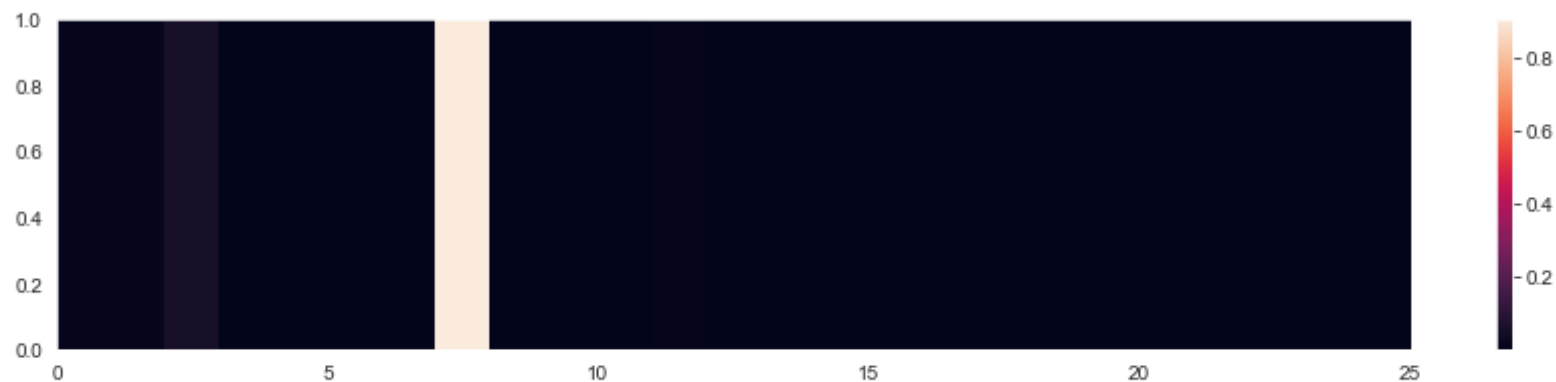
|    |      |   |
|----|------|---|
| 1  | 0.00 | global stocks rebound on rate cut hopes                   |
| 2  | 0.00 | deflation creeps up on japan                              |
| 3  | 0.00 | fed and bank of japan officials flag deflation risks      |
| 4  | 0.00 | goldman cuts u.s. growth forecast                         |
| 5  | 0.01 | instant view: citigroup shares crash below \$4, cds widen |
| 6  | 0.00 | u.s. consumers expect steep unemployment rise: survey     |
| 7  | 0.00 | households to cut christmas gifts spending: survey        |
| 8  | 0.03 | oil rallies from 3-1/2-year low as stocks rise            |
| 9  | 0.92 | instant view geithner to be tapped for treasury sec: nbc  |
| 10 | 0.03 | wall street stages late rally on geithner news            |
| 11 | 0.00 | back-to-basics in fashion for u.s. stocks                 |
| 12 | 0.00 | even google scales back on holiday fun                    |



== Sample Idx = 527

Date: 2008-11-25

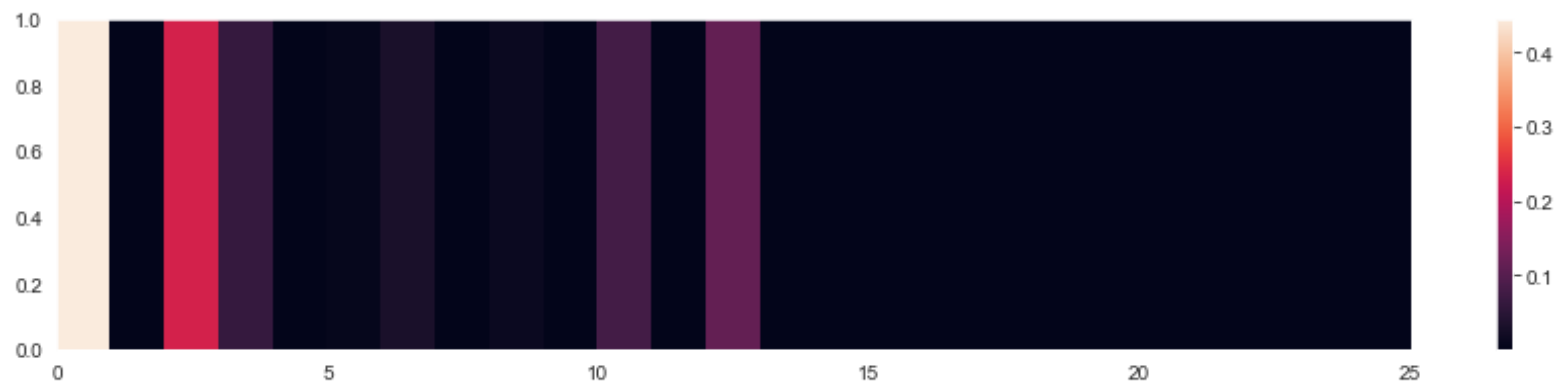
|    |      |  |
|----|------|--|
| 1  | 0.03 | google to cut contract workers: report                       |
| 2  | 0.03 | shares fall in europe and yen rallies broadly                |
| 3  | 0.12 | instant view: gdp contracts 0.5 percent in q3                |
| 4  | 0.00 | gdp contraction deeper than first thought                    |
| 5  | 0.00 | consumer confidence improves moderately                      |
| 6  | 0.00 | oecd sees big boost from china fiscal stimulus               |
| 7  | 0.00 | oecd urges more stimulus to fight recession                  |
| 8  | 0.77 | instant view: u.s. announces program to aid consumer lending |
| 9  | 0.00 | paulson says u.s. situation worse if no bailout              |
| 10 | 0.00 | oil drops nearly 7 percent                                   |
| 11 | 0.00 | economy shrinks at fastest pace in seven years               |
| 12 | 0.03 | fed plan boosts dow, s&p as cisco sinks nasdaq               |



== Sample Idx = 560

Date: 2009-01-14

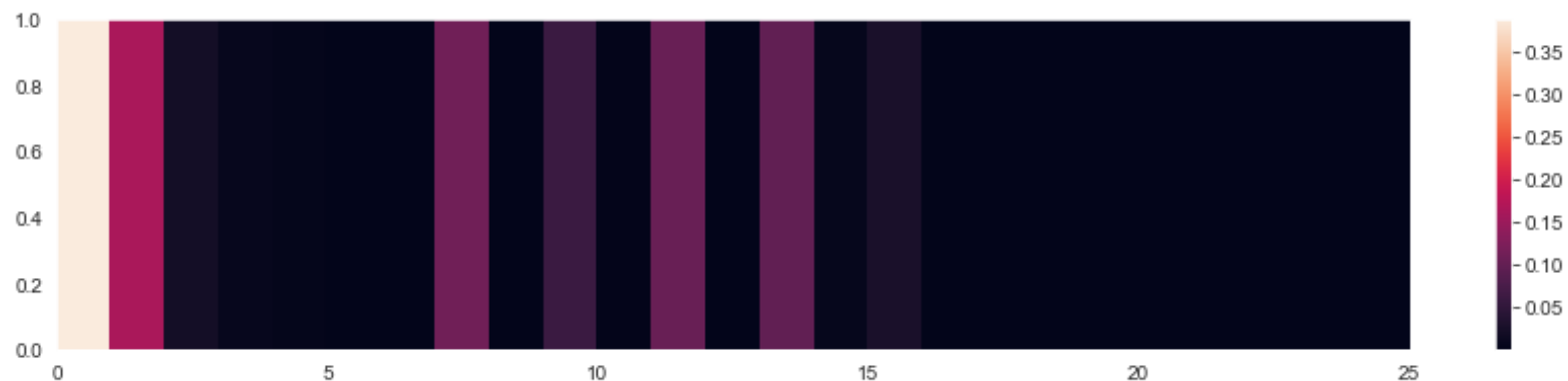
|    |      |  |
|----|------|--|
| 1  | 0.42 | google hopes to take on microsoft using resellers            |
| 2  | 0.00 | china overtakes germany in growth for 2007                   |
| 3  | 0.17 | u.s. import, export prices fall fifth straight month         |
| 4  | 0.07 | instant view: retail sales fall 2.7 percent in dec           |
| 5  | 0.00 | banking concerns weigh on global shares                      |
| 6  | 0.01 | november inventories fall at fastest pace in 7 years         |
| 7  | 0.04 | nortel shares drop 79 percent on tsx after bankruptcy filing |
| 8  | 0.00 | oil falls on u.s. stock build, weak demand                   |
| 9  | 0.02 | apple shares fall after jobs to take leave                   |
| 10 | 0.00 | retail sales dive as holiday spending slumps                 |
| 11 | 0.09 | instant view: apple ceo jobs to take medical leave           |
| 12 | 0.00 | stocks falls on bank anxiety, apple down after bell          |
| 13 | 0.14 | bank of america drops on government aid report               |
| 14 | 0.00 | apple's jobs takes medical leave, shares tumble              |



== Sample Idx = 561

Date: 2009-01-14

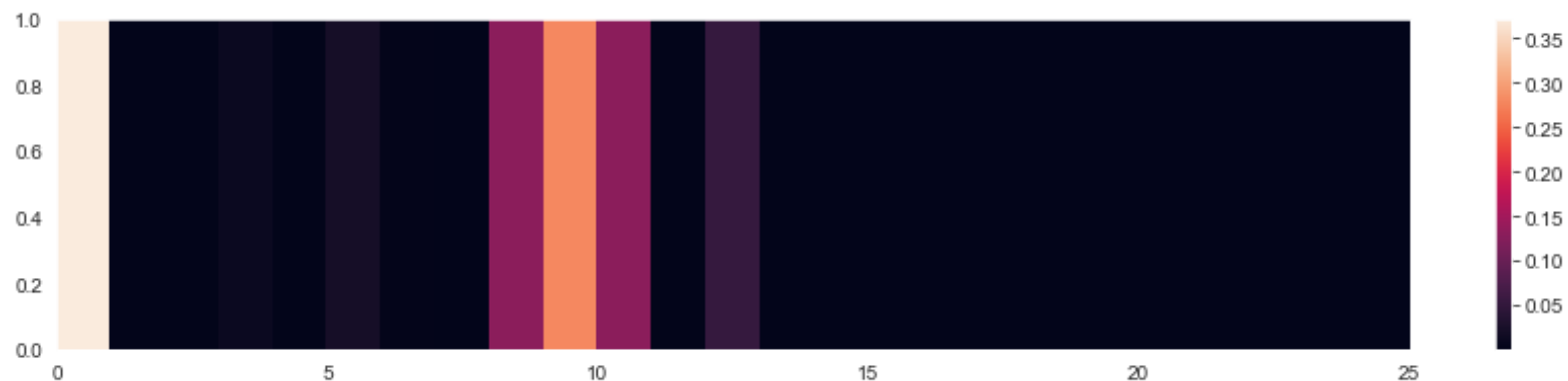
|    |      |   |
|----|------|---|
| 1  | 0.30 | google to cut 100 recruiter jobs                        |
| 2  | 0.13 | bank of america drops on government aid report          |
| 3  | 0.03 | apple shares fall after jobs to take leave              |
| 4  | 0.01 | depression ahead, prepare for stock rout: socgen        |
| 5  | 0.01 | global stocks fall                                      |
| 6  | 0.00 | new jobless claims up more than expected                |
| 7  | 0.00 | new jobless claims up more than expected                |
| 8  | 0.11 | factbox: quick facts about apple ceo steve jobs         |
| 9  | 0.00 | investors fear jobs-less apple                          |
| 10 | 0.06 | apple could face lawsuits over jobs' health             |
| 11 | 0.01 | jobs used bravado, charisma as public face of apple     |
| 12 | 0.10 | instant view: apple ceo jobs to take medical leave      |
| 13 | 0.00 | instant view: producer prices fall, jobless claims rise |
| 14 | 0.10 | factory index plummets to record low: mapi              |
| 15 | 0.01 | apple's jobs takes medical leave                        |
| 16 | 0.04 | apple shares pare losses                                |
| 17 | 0.00 | oil falls 5 percent on sagging demand outlook           |
| 18 | 0.00 | job market, factory activity remain weak                |
| 19 | 0.00 | global lending thaw may yet return to deep freeze       |
| 20 | 0.00 | stocks buoyed by stimulus hopes but bank shares tumble  |



== Sample Idx = 564

Date: 2009-01-20

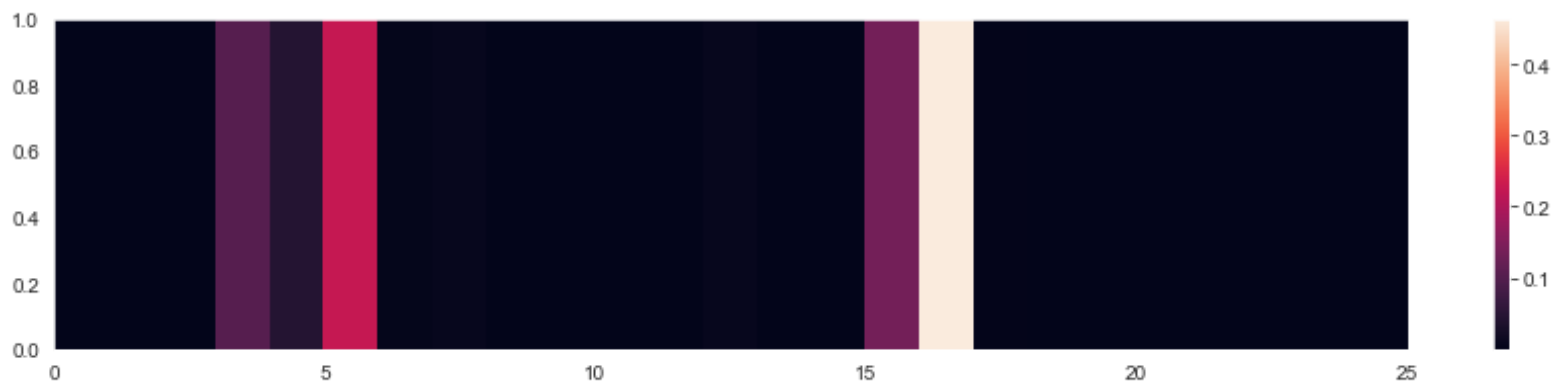
|    |      |  |  |
|----|------|--|--|
| 1  | 0.36 |  | google to halt print ads program for newspapers            |
| 2  | 0.00 |  | world oil demand shrinks                                   |
| 3  | 0.00 |  | global stocks slide as bank crisis deepens                 |
| 4  | 0.01 |  | wall street set for higher open, boosted by ibm            |
| 5  | 0.00 |  | factories sickly in december despite upward revision       |
| 6  | 0.02 |  | apple faces sec review over jobs health disclosure: report |
| 7  | 0.00 |  | analysts' view: geithner faces tough questions in congress |
| 8  | 0.00 |  | oil jumps nearly 7 percent on supply cuts, dollar          |
| 9  | 0.13 |  | instant view: apple, ebay unveil quarterly earnings        |
| 10 | 0.26 |  | sec reviews disclosure of apple ceo health: report         |
| 11 | 0.13 |  | instant view: apple and ebay unveil quarterly earnings     |
| 12 | 0.00 |  | stocks rebound on ibm, banks; apple jumps late             |
| 13 | 0.07 |  | apple profit beats expectations, shares jump               |



== Sample Idx = 565

Date: 2009-01-21

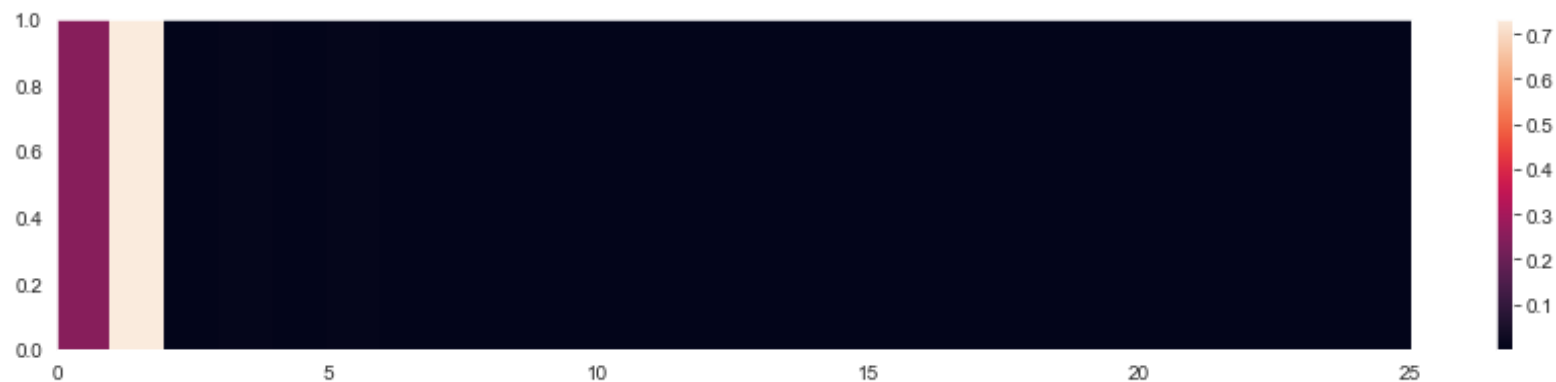
|    |      |   |
|----|------|---|
| 1  | 0.00 | factbox: u.s. jobs-losses train rumbles on            |
| 2  | 0.00 | investors see economy slowing google's growth         |
| 3  | 0.00 | china's economy slows sharply as crisis bites         |
| 4  | 0.11 | instant view: apple, ebay unveil quarterly earnings   |
| 5  | 0.05 | apple profit beats expectations, shares jump          |
| 6  | 0.20 | sec reviews disclosure of apple ceo health: report    |
| 7  | 0.01 | china's urban-rural wealth gap widens in 2008         |
| 8  | 0.01 | global stocks off highs after nokia                   |
| 9  | 0.00 | jobless claims increased sharply last week            |
| 10 | 0.00 | instant view: jobless claims rise in latest week      |
| 11 | 0.00 | apple rises 7 percent following strong results        |
| 12 | 0.00 | oil rises as u.s. stimulus hopes outweigh weak demand |
| 13 | 0.01 | palm investors worry apple may get touchy over pre    |
| 14 | 0.00 | jobless claims surge and housing starts tumble        |
| 15 | 0.00 | stocks drop on microsoft and data but google up late  |
| 16 | 0.13 | google profit beats on strong ad sales                |
| 17 | 0.48 | instant view: google results beat expectations        |
| 18 | 0.00 | home prices may drop into 2010 or longer: shiller     |



== Sample Idx = 566

Date: 2009-01-22

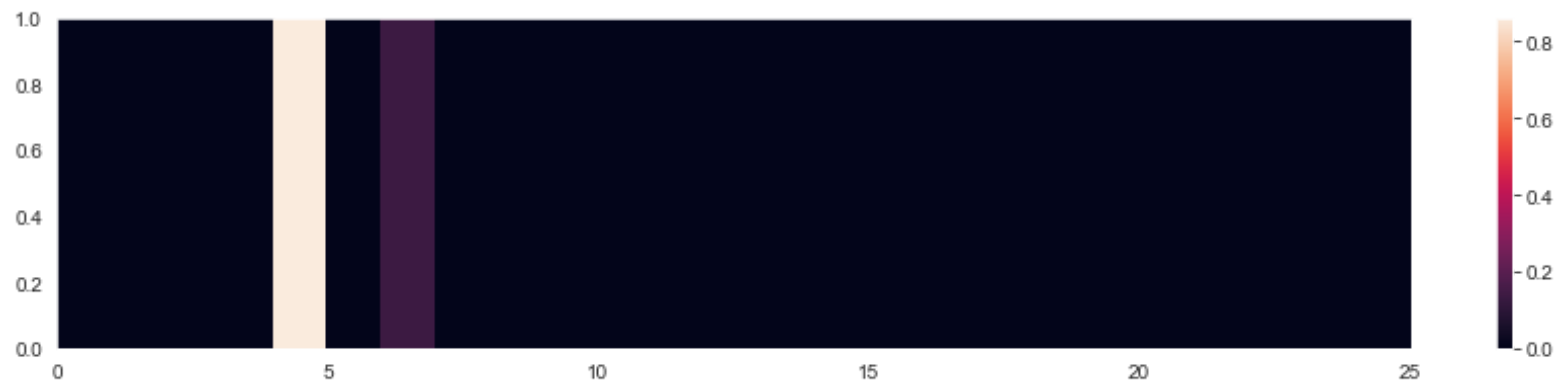
|   |      |  |
|---|------|--|
| 1 | 0.22 | google profit beats on strong ad sales             |
| 2 | 0.76 | instant view: google results beat expectations     |
| 3 | 0.00 | earnings and recession batter world stocks         |
| 4 | 0.01 | ge shares slide after nyse open                    |
| 5 | 0.00 | oil settles 6 percent higher as opec output drops  |
| 6 | 0.00 | banks buoy s&p, ge hits dow; nasdaq up with google |



== Sample Idx = 580

Date: 2009-02-12

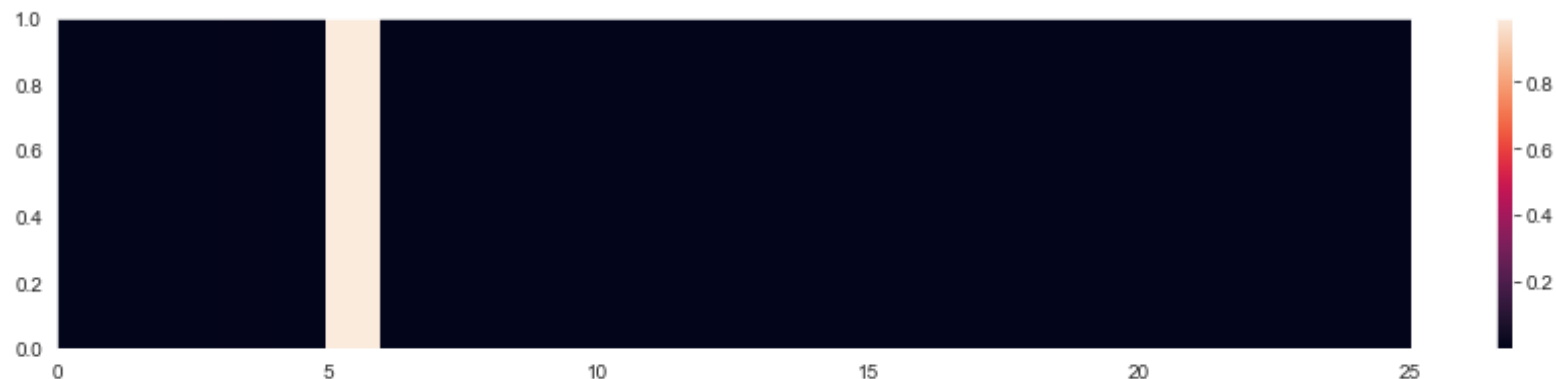
|   |      |  |  |
|---|------|--|--|
| 1 | 0.00 |  | u.s. jobless claims dip but by less than expected    |
| 2 | 0.00 |  | u.s. retail sales unexpectedly up 1 percent          |
| 3 | 0.00 |  | instant view: retail sales rise 1 percent in january |
| 4 | 0.00 |  | foreclosures push u.s. home prices to 5-year low     |
| 5 | 0.77 |  | google exits broadcast radio ad business             |
| 6 | 0.00 |  | u.s. crude drops 5.5 percent on supply glut          |
| 7 | 0.22 |  | google scraps broadcast radio ad business            |
| 8 | 0.00 |  | obama mortgage plan news spurs late market rally     |
| 9 | 0.00 |  | retail sales rebound, jobless claims stay high       |



== Sample Idx = 581

Date: 2009-02-12

|   |      |   |
|---|------|---|
| 1 | 0.00 | retail sales rebound, jobless claims stay high          |
| 2 | 0.00 | instant view: u.s. consumers' mood sours in feb         |
| 3 | 0.00 | u.s. consumers, economists unanimously grim             |
| 4 | 0.04 | u.s. companies eye worst quarter in a decade            |
| 5 | 0.00 | u.s. oil jumps 10 percent on stimulus hopes             |
| 6 | 0.95 | google to offer paid smartphone apps in apple challenge |
| 7 | 0.00 | wall st. slides as banks eclipse housing optimism       |

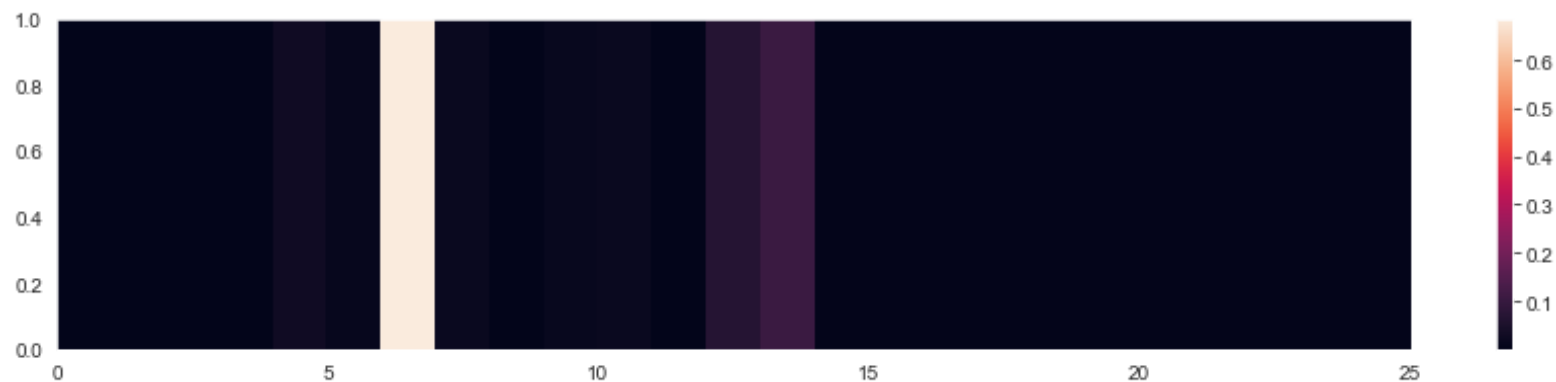


== Sample Idx = 594

Date: 2009-03-05

|    |      |  |
|----|------|--|
| 1  | 0.00 | gm hits global stocks; european fx down on boe, ecb    |
| 2  | 0.00 | new u.s. jobless claims eased last week                |
| 3  | 0.00 | instant view: u.s. jobless claims ease                 |
| 4  | 0.00 | gm tumbles on viability concerns while ge rebounds     |
| 5  | 0.05 | u.s. factory orders fell 1.9 percent in january        |
| 6  | 0.02 | citigroup shares tumble below \$1                      |
| 7  | 0.49 | instant view: u.s. mortgage delinquencies at record    |
| 8  | 0.03 | dj indexes says watching citi situation "closely"      |
| 9  | 0.01 | oil falls 4 percent tracking wall street               |
| 10 | 0.03 | even stock market bears looking for an end to sell-off |
| 11 | 0.03 | dj indexes says watching citi situation "closely"      |
| 12 | 0.00 | u.s. productivity plummets, mortgage defaults up       |
| 13 | 0.12 | google letting cash "pile up": ceo                     |
| 14 | 0.15 | dow and s&p hit 12-year lows                           |

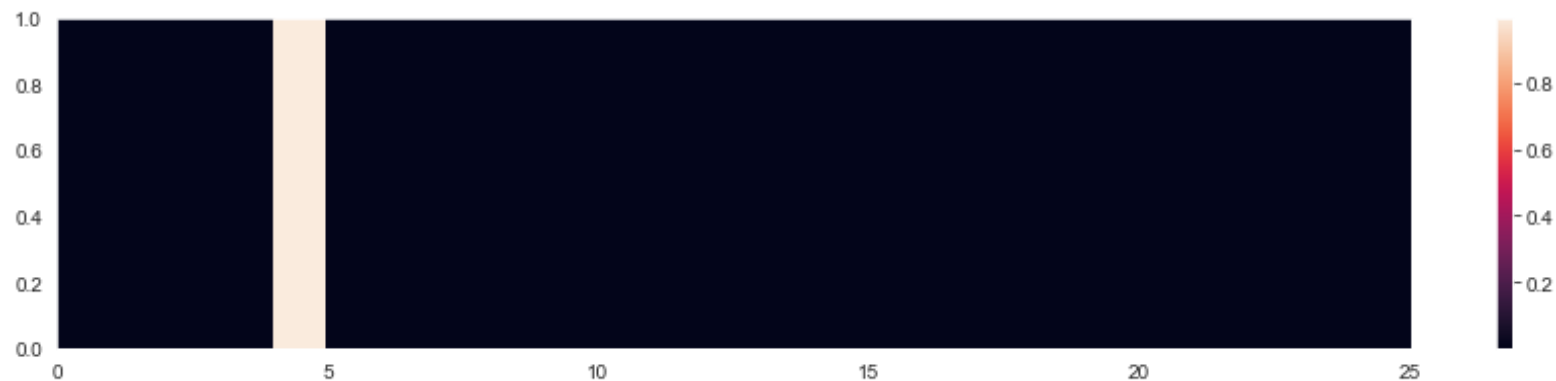




== Sample Idx = 598

Date: 2009-03-10

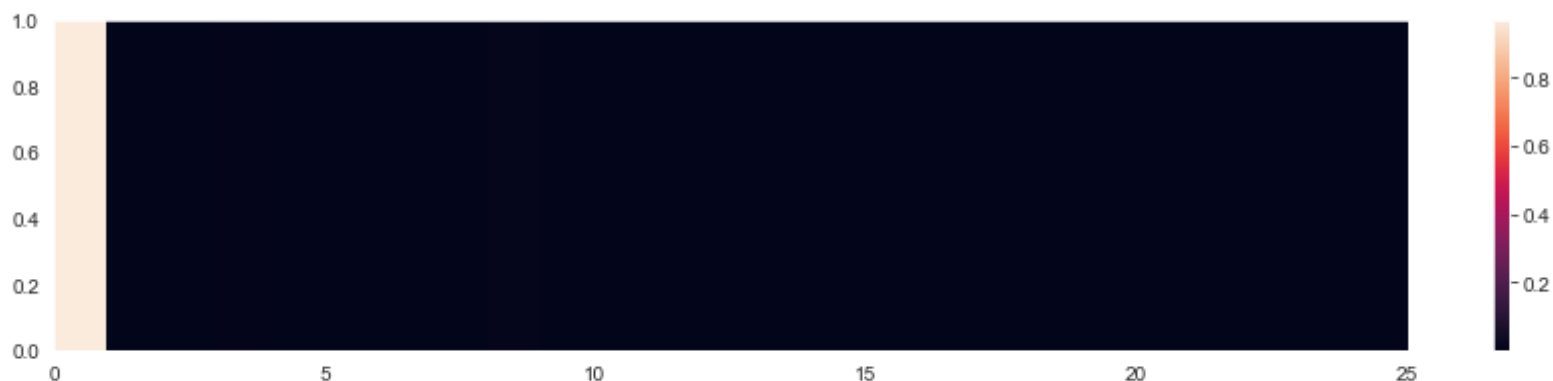
|   |      |   |
|---|------|---|
| 1 | 0.00 | global stocks rally on citi memo, dollar slumps             |
| 2 | 0.00 | bringing back uptick rule could soothe u.s. markets         |
| 3 | 0.00 | china businesses less worried about growth: survey          |
| 4 | 0.00 | apple orders 10-inch touchscreens for third quarter: source |
| 5 | 1.00 | google to target ads based on online activity               |
| 6 | 0.00 | global stocks gain for second day as oil tumbles            |
| 7 | 0.00 | oil drops 7 percent on weak demand                          |
| 8 | 0.00 | wall street up as dimon's remarks buoy banks                |



== Sample Idx = 609

Date: 2009-03-25

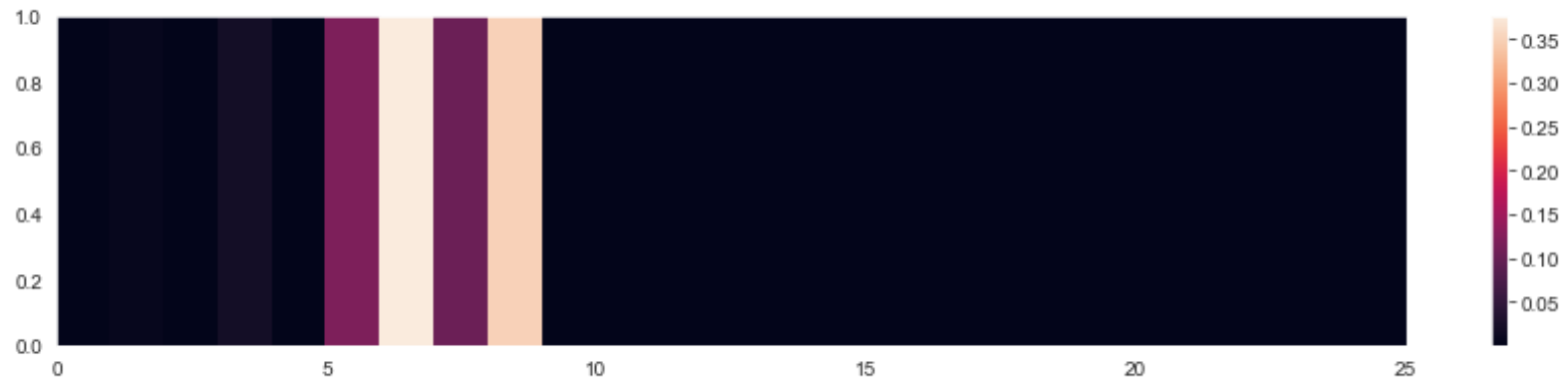
|    |      |   |
|----|------|---|
| 1  | 0.90 | wall st. rallies late as data offsets bond sale gloom |
| 2  | 0.00 | u.s. home sales climb at fastest pace in 10 months    |
| 3  | 0.01 | dr pepper snapple profit beats street                 |
| 4  | 0.02 | best buy jumps after quarterly results                |
| 5  | 0.00 | u.s. workers on jobless benefits hit record           |
| 6  | 0.01 | u.s. fourth-quarter gdp falls 6.3 percent             |
| 7  | 0.00 | instant view: u.s. gdp falls, jobless rise            |
| 8  | 0.00 | fed's lockhart: better data does not signal recovery  |
| 9  | 0.03 | dr pepper snapple beats estimates, shares jump        |
| 10 | 0.00 | u.s. economy shrinks, profits plunge in q4            |
| 11 | 0.01 | google to cut 200 sales, marketing jobs               |
| 12 | 0.00 | risk appetite grows; world stocks, dollar gain        |



== Sample Idx = 610

Date: 2009-03-26

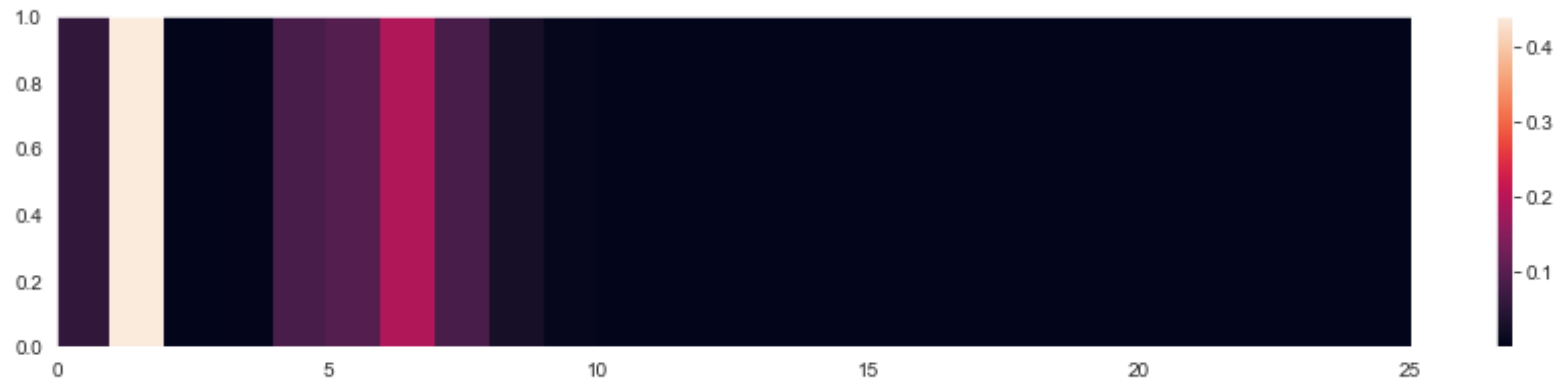
|   |      |  |
|---|------|--|
| 1 | 0.00 | economic optimism boosts wall street                 |
| 2 | 0.01 | dip after run-up; euro falls on german warning       |
| 3 | 0.00 | u.s. consumer spending up modestly, incomes fall     |
| 4 | 0.03 | u.s. consumers' mood improves slightly in march      |
| 5 | 0.00 | bonds to keep star role in company fundraisings      |
| 6 | 0.09 | instant view - u.s. consumer spending up 0.2 percent |
| 7 | 0.27 | u.s. consumer spending, sentiment edge up            |
| 8 | 0.09 | profit-taking, bank caution halt market run-up       |
| 9 | 0.29 | google still hiring, even after layoffs              |



== Sample Idx = 612

Date: 2009-03-31

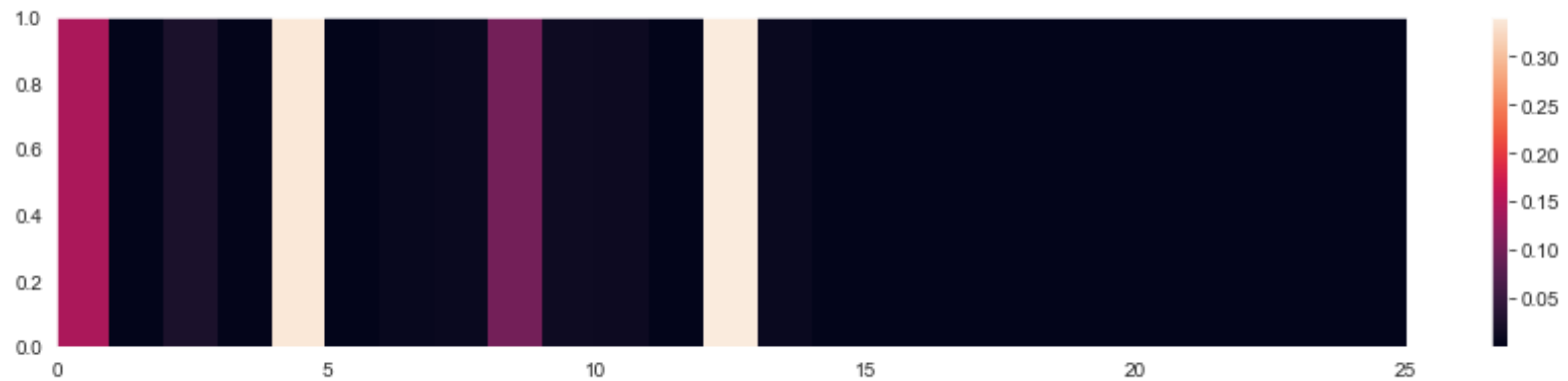
|    |      |  |  |
|----|------|--|--|
| 1  | 0.07 |  | world stocks set for best month in over 6 years                  |
| 2  | 0.39 |  | u.s. stock futures point to higher open                          |
| 3  | 0.00 |  | u.s. midwest business shrinks more rapidly in march              |
| 4  | 0.02 |  | instant view: u.s. january housing prices fall record 19 percent |
| 5  | 0.10 |  | instant view: u.s. consumer confidence up slightly in march      |
| 6  | 0.06 |  | google forms \$100 million venture fund                          |
| 7  | 0.19 |  | u.s. consumer confidence barely above record low                 |
| 8  | 0.10 |  | instant view: u.s. consumer confidence up slightly in march      |
| 9  | 0.04 |  | record drop in home prices keeps u.s. consumers glum             |
| 10 | 0.02 |  | oil prices up 3 percent tracking wall street                     |



== Sample Idx = 613

Date: 2009-03-31

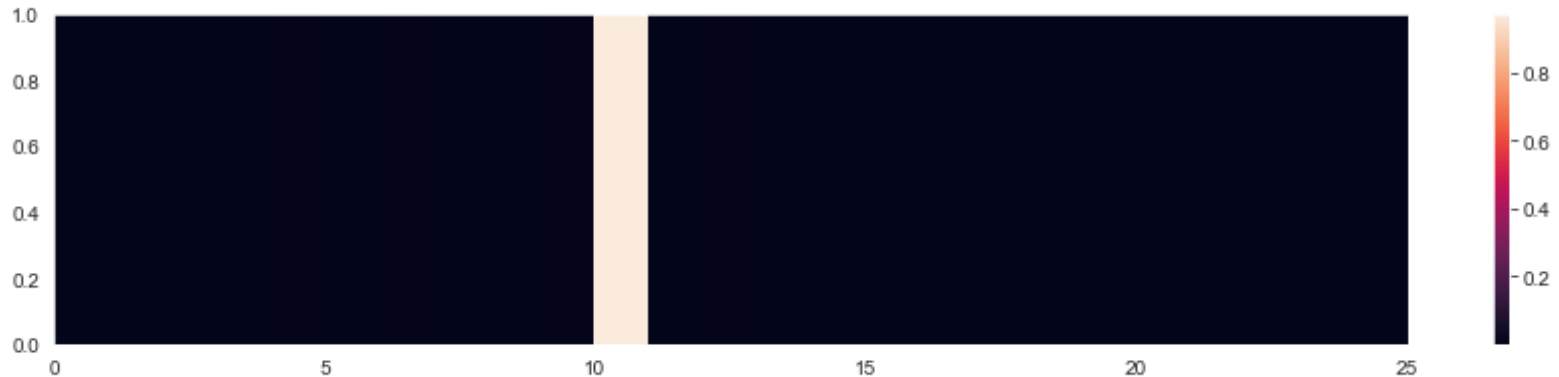
|    |      |  |  |
|----|------|--|--|
| 1  | 0.14 |  | for wall street, march is best month since 2002            |
| 2  | 0.00 |  | u.s. mortgage applications climb, rates at fresh low       |
| 3  | 0.02 |  | hp says pondering google's android                         |
| 4  | 0.00 |  | u.s. private sector axes 742,000 jobs in march             |
| 5  | 0.32 |  | instant view: u.s. march ism index above expectations      |
| 6  | 0.00 |  | u.s. factory contraction slows a tad in march: ism         |
| 7  | 0.01 |  | u.s. planned layoffs down in march but up for quarter      |
| 8  | 0.01 |  | big u.s. job loss to continue: macroeconomic advisers      |
| 9  | 0.11 |  | instant view: u.s. private sector job losses rise in march |
| 10 | 0.02 |  | u.s. february pending home sales rise 2.1 percent: nar     |
| 11 | 0.02 |  | global stocks gain as data stirs hope, oil falls           |
| 12 | 0.00 |  | oil falls over \$1 as u.s. inventories rise                |
| 13 | 0.33 |  | wall street rallies on manufacturing and homes data        |
| 14 | 0.01 |  | u.s. sees more job losses, factory contraction slows       |
| 15 | 0.00 |  | u.s. seen facing danger of 2nd recession next year         |



== Sample Idx = 615

Date: 2009-04-02

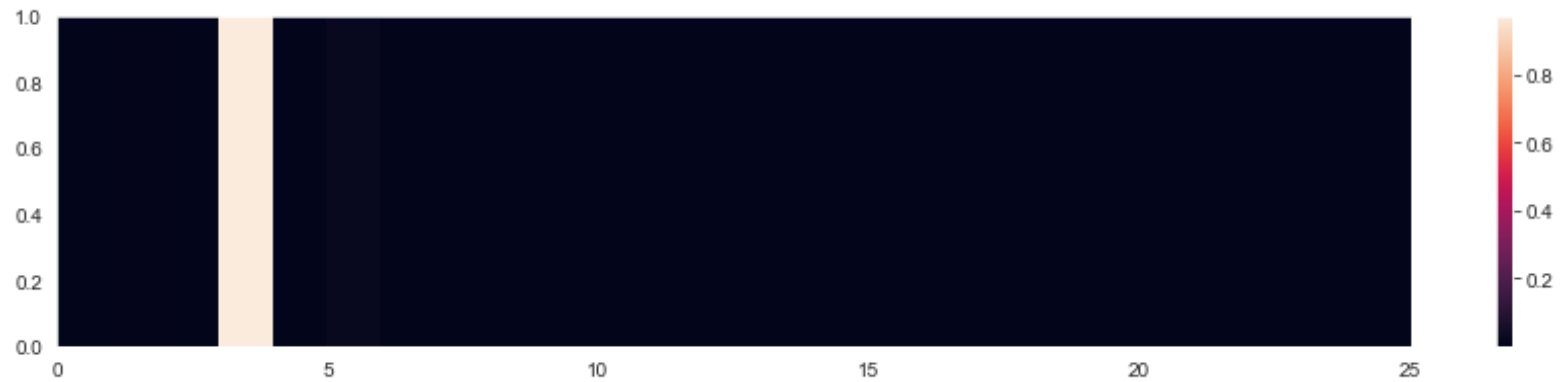
|    |      |  |
|----|------|--|
| 1  | 0.00 | wall street climbs on economy, bank rule and g20   |
| 2  | 0.00 | u.s. warns of bleak march jobs report              |
| 3  | 0.00 | u.s. economy sheds 663,000 jobs                    |
| 4  | 0.01 | pimco says stock rally vulnerable given data       |
| 5  | 0.01 | rim shares surge on strong results                 |
| 6  | 0.00 | u.s. services sector shrinks again in march        |
| 7  | 0.01 | instant view: u.s. sheds 663,000 jobs              |
| 8  | 0.00 | oil settles slightly lower, job report weighs      |
| 9  | 0.00 | u.s. jobless rate hits 25-year high                |
| 10 | 0.01 | blogs clash over whether google could buy twitter  |
| 11 | 0.94 | google should defend trademark suit: appeals court |
| 12 | 0.00 | u.s. stocks rise, bonds fall as sentiment gains    |
| 13 | 0.01 | optimism may extend rally in short week            |



== Sample Idx = 616

Date: 2009-04-03

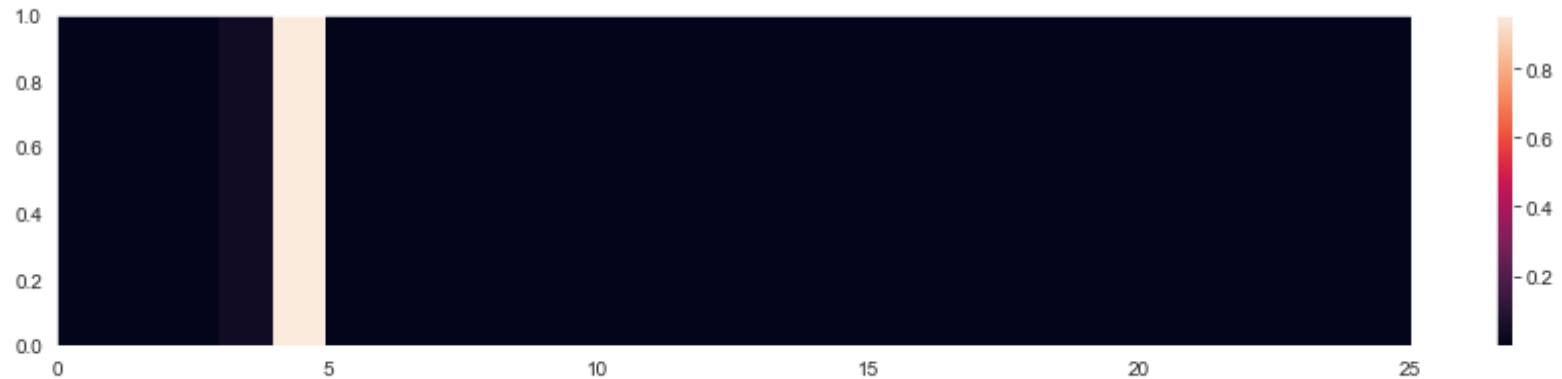
|   |      |  |
|---|------|--|
| 1 | 0.01 | dow ends above 8,000 in best 4-week run since 1933     |
| 2 | 0.01 | optimism may extend rally in short week                |
| 3 | 0.00 | hsbc shares climb after strong cashcall demand         |
| 4 | 0.91 | new t-mobile gadgets to sport google's android: report |
| 5 | 0.00 | oil falls toward \$51 tracking stock market            |
| 6 | 0.05 | wall street rally stumbles as bank fears reemerge      |
| 7 | 0.00 | world stocks fall on fading optimism                   |



== Sample Idx = 623

Date: 2009-04-15

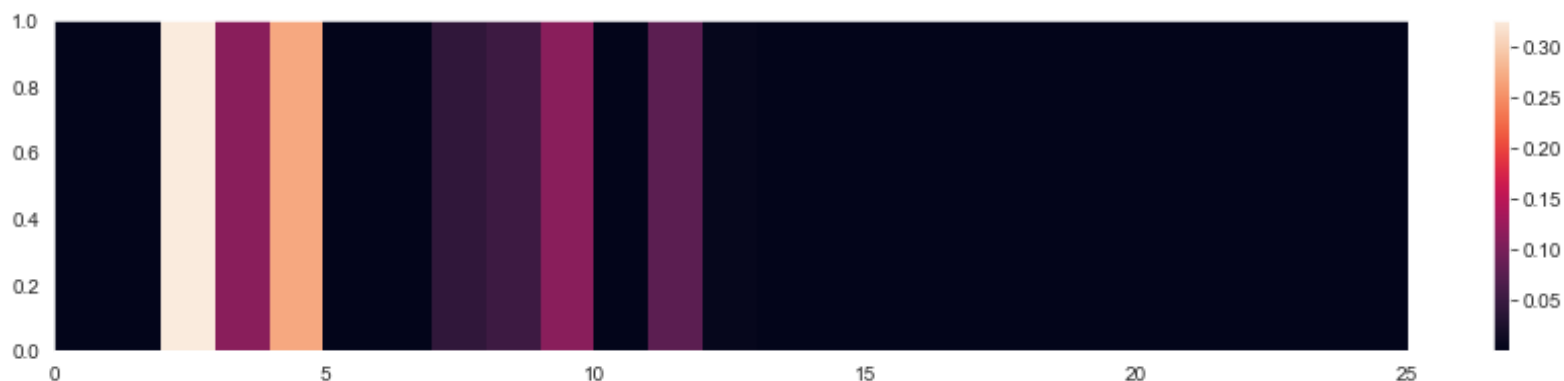
|    |      |  |  |
|----|------|--|--|
| 1  | 0.00 |  | wall street rises on hints recession easing                  |
| 2  | 0.00 |  | instant view: china q1 gdp growth slows                      |
| 3  | 0.00 |  | snap analysis: china gdp may dent asia's rampant stock rally |
| 4  | 0.06 |  | google widens lead in u.s. searches: comscore                |
| 5  | 0.90 |  | google machine put to test in 1st quarter                    |
| 6  | 0.00 |  | china says economy in better shape than expected             |
| 7  | 0.00 |  | china growth slowest on record                               |
| 8  | 0.00 |  | jobless claims drop but continued claims at record           |
| 9  | 0.00 |  | jobless claims drop but continued claims at record           |
| 10 | 0.00 |  | falling housing starts dampen recovery hopes                 |
| 11 | 0.00 |  | ebay to buy s.korea's gmarket for up to \$1.2 billion        |
| 12 | 0.00 |  | global stocks rise on jpmorgan                               |
| 13 | 0.00 |  | instant view: us housing starts fall 10.8 pct in march       |
| 14 | 0.00 |  | oil rises 1.5 percent toward \$50                            |
| 15 | 0.00 |  | americans less pessimistic about u.s. economy: gallup        |



== Sample Idx = 624

Date: 2009-04-16

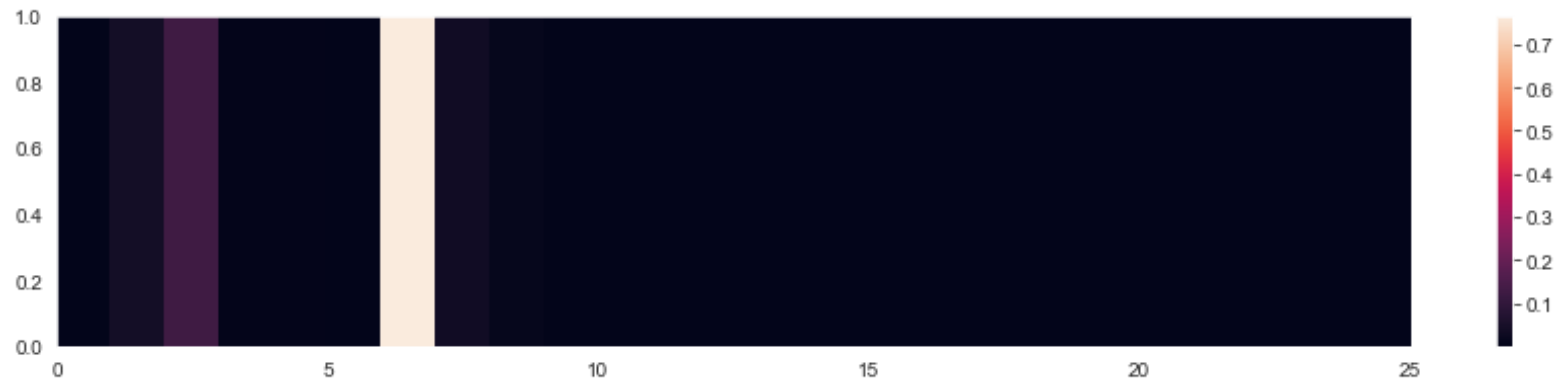
|    |      |  |
|----|------|--|
| 1  | 0.00 | wall street soars on tech bets and jpmorgan              |
| 2  | 0.00 | recession drags but u.s. recovery hope grows             |
| 3  | 0.25 | instant view: google q1 beats wall street view           |
| 4  | 0.14 | google profit beats expectations                         |
| 5  | 0.23 | google's youtube clinches deal with studios              |
| 6  | 0.00 | general growth filing ups stakes in commercial mortgages |
| 7  | 0.00 | recession drags but u.s. recovery hope grows             |
| 8  | 0.08 | index futures point to lower wall st open                |
| 9  | 0.07 | big investors buy into stock rally: state st             |
| 10 | 0.14 | google profit beats expectations                         |
| 11 | 0.00 | citigroup falls after results, cfo comments              |
| 12 | 0.07 | instant view: u.s. consumer mood rebounds in april       |
| 13 | 0.02 | u.s. consumer sentiment highest since september          |
| 14 | 0.00 | global stocks rise on u.s. earnings, oil firms           |



== Sample Idx = 636

Date: 2009-05-04

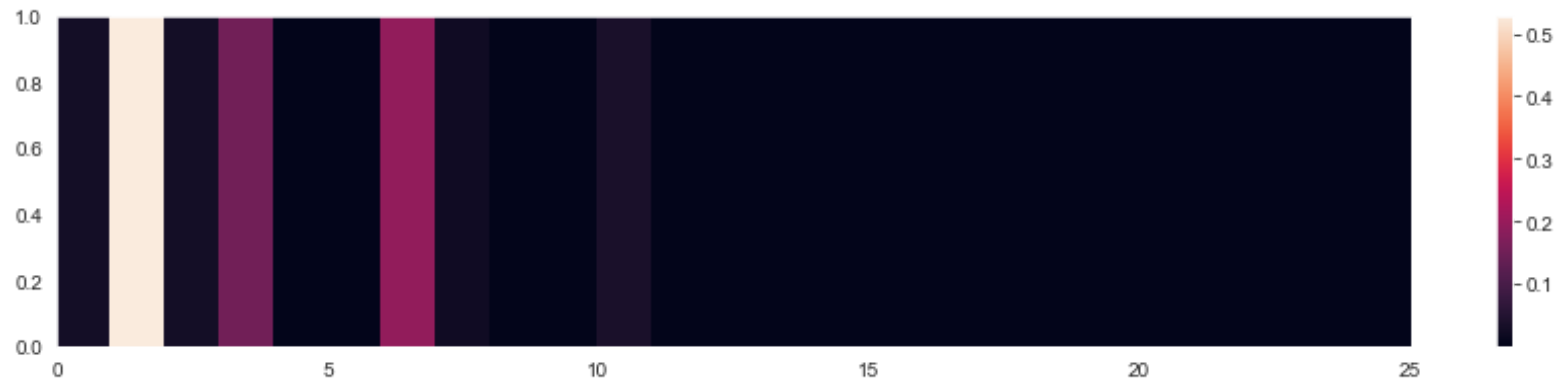
|   |      |   |
|---|------|---|
| 1 | 0.00 | apple's cash grows, but no hint of its plans            |
| 2 | 0.09 | sales and construction data lift hopes for u.s. housing |
| 3 | 0.21 | instant view: services sector improves in april         |
| 4 | 0.01 | u.s. industry group ism sharply cuts '09 forecast       |
| 5 | 0.02 | u.s. services on the mend but 2009 outlook still grim   |
| 6 | 0.00 | oil slips from 2009 high, weak demand weighs            |
| 7 | 0.52 | ftc looks at google-apple board ties: report            |
| 8 | 0.08 | profit-taking, bank tests trip market; disney up late   |
| 9 | 0.03 | world stocks take a breather, eye u.s. stress tests     |



== Sample Idx = 639

Date: 2009-05-07

|    |      |  |
|----|------|--|
| 1  | 0.04 | sell in may? maybe not this year                       |
| 2  | 0.45 | google: american phenomenon and antitrust target       |
| 3  | 0.04 | sell in may? maybe not this year                       |
| 4  | 0.15 | instant view: biggest banks need \$74.6 bln in capital |
| 5  | 0.00 | instant view: economy sheds 539,000 jobs in april      |
| 6  | 0.00 | u.s. jobless rate hits 25-year high                    |
| 7  | 0.21 | google ceo says he expects more government scrutiny    |
| 8  | 0.03 | obama says moderating job losses "encouraging"         |
| 9  | 0.00 | u.s. recession may end this summer: ecri               |
| 10 | 0.00 | oil hits near 6 month high as u.s. data spurs optimism |
| 11 | 0.05 | global stocks, oil rally on economic optimism          |
| 12 | 0.00 | wall st leaps on bank optimism, jobs data              |
| 13 | 0.00 | u.s. sheds fewest jobs in 6 months                     |

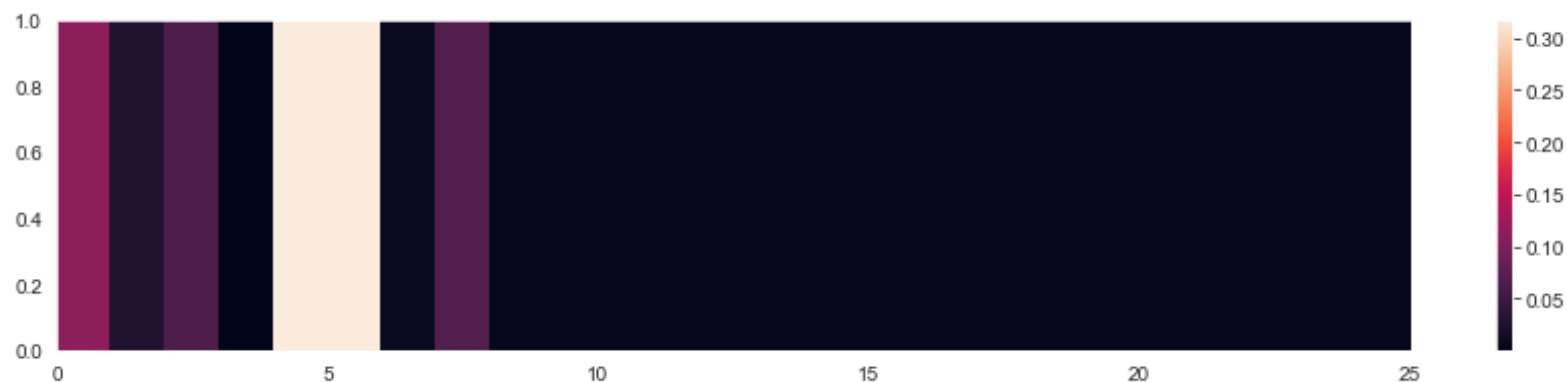




== Sample Idx = 673

Date: 2009-06-26

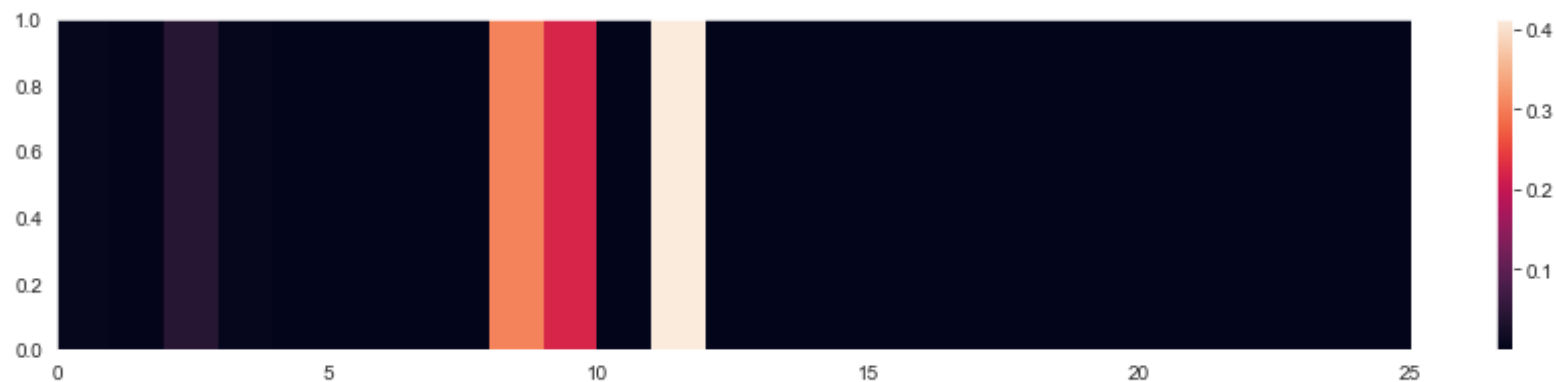
|   |      |  |
|---|------|--|
| 1 | 0.12 | consumer sentiment rises in june: survey           |
| 2 | 0.03 | consumer spending rebounds, supports recovery view |
| 3 | 0.09 | google ceo says worst of crisis is over            |
| 4 | 0.00 | oil drops on wall street, nigeria amnesty report   |
| 5 | 0.27 | instant view 4: consumer spending rose in may      |
| 6 | 0.27 | instant view: consumer spending rose in may        |
| 7 | 0.01 | u.s. spending and income rise, mood improves       |
| 8 | 0.08 | palm lifts nasdaq, but oil drags dow down          |



== Sample Idx = 680

Date: 2009-07-07

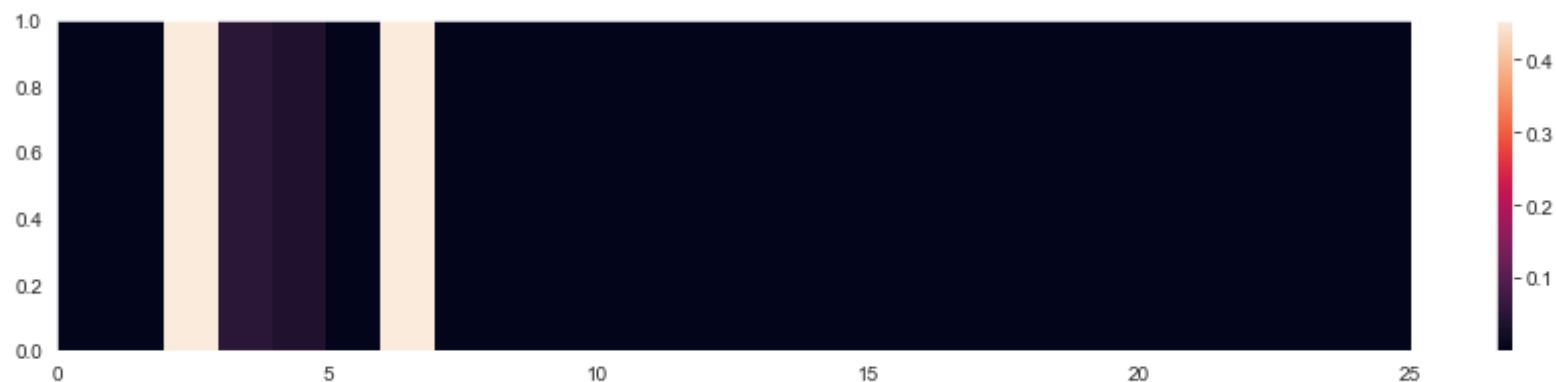
|    |      |   |
|----|------|---|
| 1  | 0.01 | u.s. must be open to second economic stimulus: hoyer  |
| 2  | 0.00 | france, britain seek to curb oil market volatility    |
| 3  | 0.04 | obama ready to do more to stem job losses: official   |
| 4  | 0.01 | u.s. must be open to second economic stimulus: hoyer  |
| 5  | 0.00 | economy angst hits global stocks, oil; yen gains      |
| 6  | 0.00 | u.s. mortgage applications climb eases fed pressure   |
| 7  | 0.00 | g8: focus on economic recovery first, cost later      |
| 8  | 0.00 | oil falls 4 percent on eia report, economic doubts    |
| 9  | 0.33 | u.s. consumer credit edges down \$3.23 billion in may |
| 10 | 0.20 | obama not talking about second stimulus: official     |
| 11 | 0.00 | dow, nasdaq squeeze out gains before alcoa results    |
| 12 | 0.40 | google's pc gamble will take years to play out        |



== Sample Idx = 681

Date: 2009-07-08

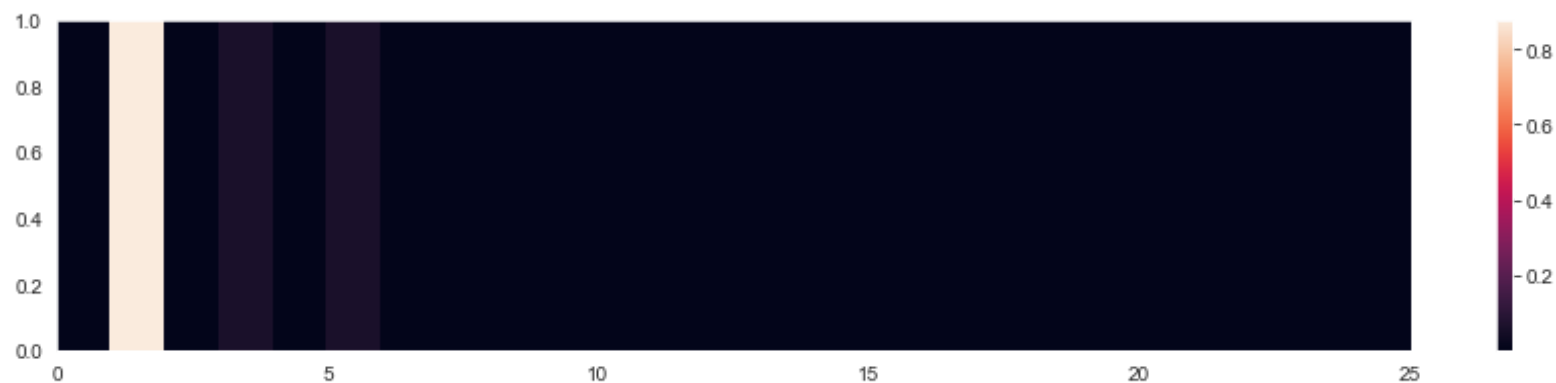
|    |      |   |
|----|------|---|
| 1  | 0.00 | ubs stability important for system: swiss minister    |
| 2  | 0.00 | google-microsoft war may bring down pc prices         |
| 3  | 0.39 | google takes aim at microsoft with new pc platform    |
| 4  | 0.11 | google's pc gamble will take years to play out        |
| 5  | 0.09 | u.s. consumer credit edges down \$3.23 billion in may |
| 6  | 0.00 | alcoa earnings help boost stocks, dollar slides       |
| 7  | 0.39 | google takes aim at microsoft with new pc platform    |
| 8  | 0.00 | jobless claims drop steeply, skewed by autos          |
| 9  | 0.00 | sterling jumps as boe opts for no qe expansion        |
| 10 | 0.00 | warren buffett says second stimulus might be needed   |
| 11 | 0.00 | instant view: u.s. jobless claims fall sharply        |
| 12 | 0.00 | u.s. wholesale inventories drop for ninth month       |
| 13 | 0.00 | warren buffett says second stimulus might be needed   |
| 14 | 0.00 | murdoch says mood of media execs "very bearish"       |
| 15 | 0.00 | oil rises, snaps six-day slide on gasoline buying     |
| 16 | 0.00 | wall street ekes out gain on banks, materials         |



== Sample Idx = 683

Date: 2009-07-10

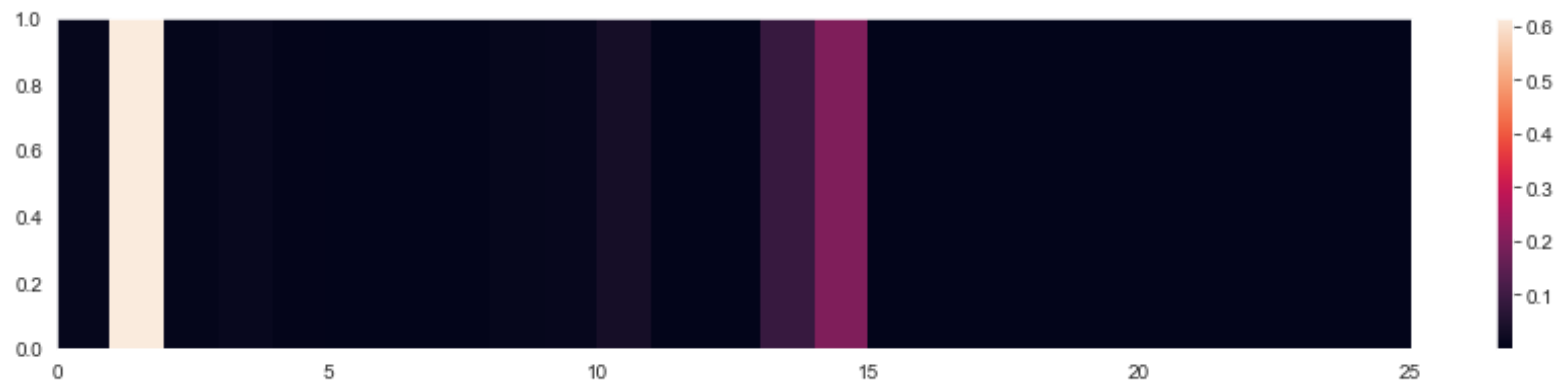
|    |      |   |
|----|------|---|
| 1  | 0.00 | waning u.s. consumer mood raises recovery questions |
| 2  | 0.84 | startups give google thumbs-up over microsoft       |
| 3  | 0.00 | geithner: too soon to decide on more stimulus       |
| 4  | 0.07 | obama says stimulus plan to kick in later this year |
| 5  | 0.00 | geithner: too soon to decide on more stimulus       |
| 6  | 0.07 | obama says stimulus plan to kick in later this year |
| 7  | 0.00 | geithner: too soon to decide on more stimulus       |
| 8  | 0.00 | cit group bonds fall sharply amid liquidity talks   |
| 9  | 0.00 | oil falls to near two-month low on economy worries  |
| 10 | 0.00 | stocks rally on corporate earnings hope, oil down   |
| 11 | 0.00 | wall st flies with banks after analyst's comments   |



== Sample Idx = 685

Date: 2009-07-15

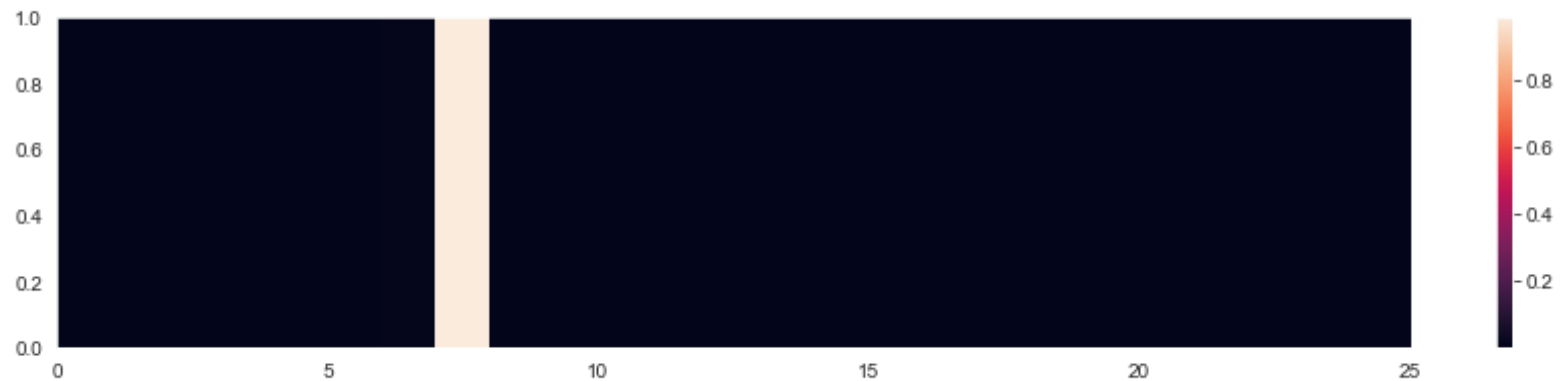
|    |      |   |
|----|------|---|
| 1  | 0.01 | global stocks hit 2-week highs                          |
| 2  | 0.17 | u.s. cpi seen up in june by most since july 2008        |
| 3  | 0.01 | instant view: consumer prices rise faster than expected |
| 4  | 0.02 | ny state factories nearly out of slump in july          |
| 5  | 0.01 | gas prices push up consumer prices in june              |
| 6  | 0.00 | u.s. industrial output falls 0.4 percent in june        |
| 7  | 0.00 | mortgage applications rise as interest rates tumble     |
| 8  | 0.00 | u.s. crude stocks off; distillates up at 25-year high   |
| 9  | 0.02 | google faced rougher landscape in second quarter        |
| 10 | 0.03 | top economists urge congress to lay off the fed         |
| 11 | 0.07 | instant view: fed had doubts about more asset buying    |
| 12 | 0.00 | u.s. industrial output appears on the mend              |
| 13 | 0.00 | oil settles 3 pct higher after inventory fall           |
| 14 | 0.07 | california governor says hopeful budget deal near       |
| 15 | 0.11 | s&p has best 3 days since march on earnings optimism    |



== Sample Idx = 686

Date: 2009-07-16

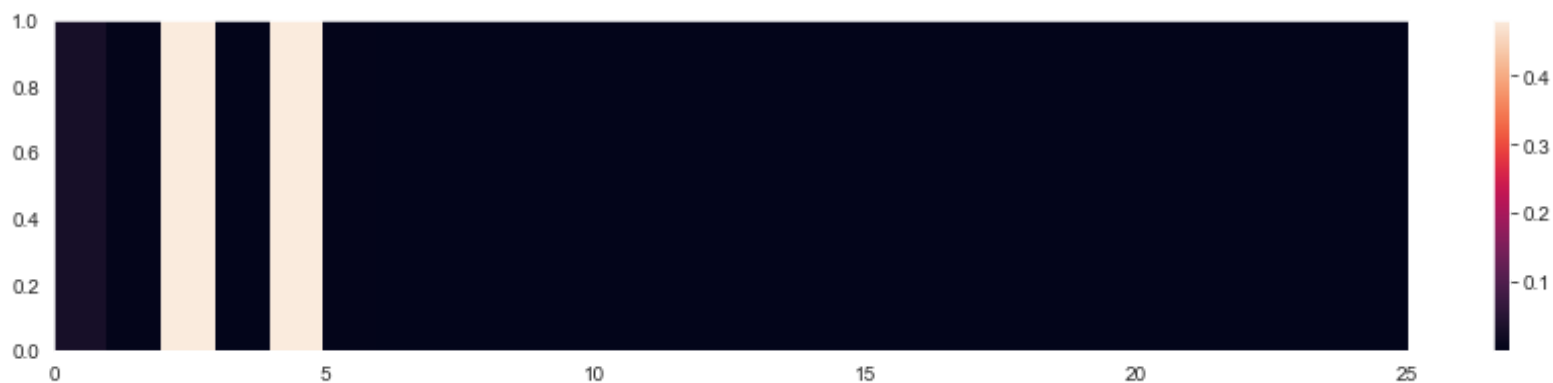
|    |  |      |  |   |
|----|--|------|--|---|
| 1  |  | 0.00 |  | talks fail to break california budget impasse       |
| 2  |  | 0.00 |  | google faced rougher landscape in second quarter    |
| 3  |  | 0.00 |  | u.s. jobless claims drop, again skewed by autos     |
| 4  |  | 0.00 |  | philly fed factory activity falls in july           |
| 5  |  | 0.00 |  | instant view: jobless claims drop in latest week    |
| 6  |  | 0.00 |  | oil prices rise with wall street                    |
| 7  |  | 0.07 |  | u.s. factory index posts first rise since mid-2007  |
| 8  |  | 0.88 |  | instant view: google, ibm beat expectations         |
| 9  |  | 0.00 |  | wall st climbs on tech shares, earnings optimism    |
| 10 |  | 0.04 |  | u.s. stocks stage late-day rally, oil gains         |
| 11 |  | 0.00 |  | key u.s. factory index slips, jobless claims tumble |
| 12 |  | 0.00 |  | worst behind us but more stimulus needed: roubini   |



== Sample Idx = 687

Date: 2009-07-16

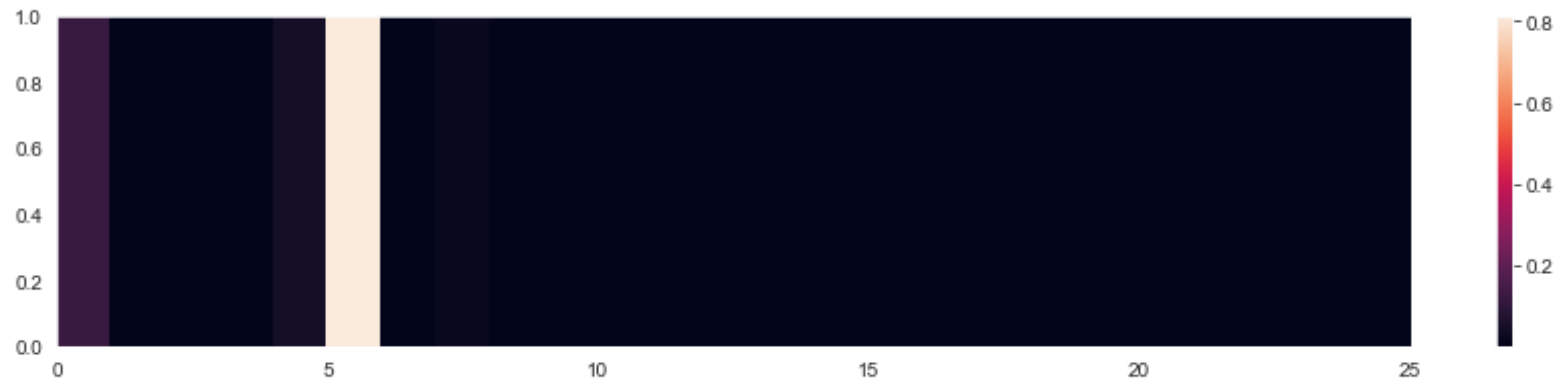
|    |      |  |
|----|------|--|
| 1  | 0.07 | google sees youtube profitable in near future        |
| 2  | 0.01 | google quarterly results fail to excite              |
| 3  | 0.45 | instant view: google, ibm beat expectations          |
| 4  | 0.00 | wall st climbs on tech shares, earnings optimism     |
| 5  | 0.45 | instant view: google, ibm beat expectations          |
| 6  | 0.01 | google quarterly results fail to excite              |
| 7  | 0.00 | world shares hit 1-month high; dollar, yen firm      |
| 8  | 0.01 | biocryst shares up after results of study            |
| 9  | 0.00 | instant view: housing starts rise more than expected |
| 10 | 0.00 | cit rumors weigh on bonds along with strong data     |
| 11 | 0.00 | u.s. housing starts, permits jump in june            |
| 12 | 0.00 | expectations high for apple quarterly results        |
| 13 | 0.00 | oil rises 2.5 pct after u.s. housing data            |
| 14 | 0.00 | wall st scores best week in 4 months with ibm's help |



== Sample Idx = 695

Date: 2009-07-29

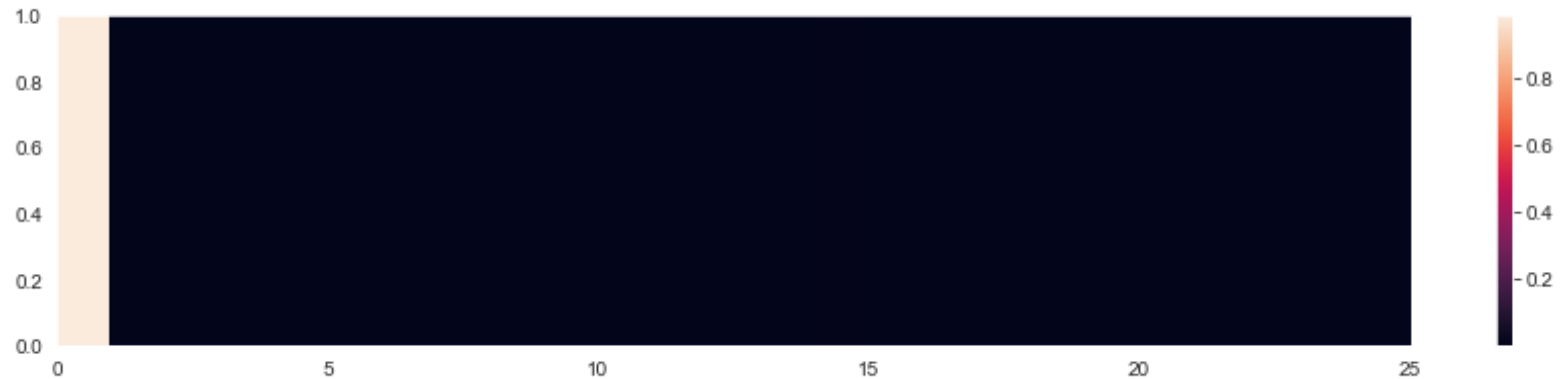
|    |      |  |
|----|------|--|
| 1  | 0.22 | yahoo extends losses after ad deal confirmation        |
| 2  | 0.01 | wellpoint shares fall as net income down               |
| 3  | 0.00 | u.s. durable goods orders slump, mortgage demand wanes |
| 4  | 0.01 | instant view: u.s. durable goods orders fell in june   |
| 5  | 0.10 | sprint nextel falls after results                      |
| 6  | 0.58 | google "interested" in microsoft-yahoo deal            |
| 7  | 0.00 | pimco's gross blasts own industry for high fees        |
| 8  | 0.07 | oil posts biggest loss since april as supplies jump    |
| 9  | 0.00 | obama expects gm, chrysler to repay loans              |
| 10 | 0.01 | oil drops in biggest loss since april, dollar up       |
| 11 | 0.00 | wall st sags on china-driven economy fear, visa off    |



== Sample Idx = 698

Date: 2009-07-31

|    |      |  |   |
|----|------|--|---|
| 1  | 0.90 |  | google's android to aim at businesses                       |
| 2  | 0.00 |  | s&p eyes 1,000 but could be ripe for retreat                |
| 3  | 0.00 |  | housing could take another turn downward: greenspan         |
| 4  | 0.00 |  | s&p eyes 1,000; could be ripe for retreat                   |
| 5  | 0.00 |  | obama officials eye more jobless aid, weigh taxes           |
| 6  | 0.00 |  | nikkei flat as profit-taking offsets auto rises             |
| 7  | 0.00 |  | banks, china kick equities to 2009 high                     |
| 8  | 0.01 |  | u.s. july ism factory index seen up, but below 50           |
| 9  | 0.00 |  | june construction spending rises                            |
| 10 | 0.01 |  | instant view: contraction slows in july                     |
| 11 | 0.01 |  | bank of america shares pare gains after sec charges         |
| 12 | 0.00 |  | oil rises over 3 percent                                    |
| 13 | 0.01 |  | timeline: for apple and google, friendship leans to rivalry |
| 14 | 0.00 |  | u.s. manufacturing slows, while construction rises          |
| 15 | 0.03 |  | factory data and ford sales help stocks extend rally        |



```
In [8]: '''
        Gen script for latex attn
        '''

reload(rpos)

reload(rba)
DATAFILES = [ 'GOOGL_00_05.p', 'GOOGL_09_05.p', 'GOOGL_15_05.p', 'GOOGL_19_05.p', 'GOOGL_23_05.p' ]
DNN_MODEL='AsyncRNN'

reload(rba)
# (df,best_param,data) = rba.hyperopt_postprocess(DATAFILES[0],DNN_MODEL)
i = 16

trials={}
trials['res'] = {}
trials['res']['attnA_tnvate'] = df['attnA_tnvate'][i]
trials['res']['y'] = df['y'][i]
trials['res']['ypred'] = df['ypred'][i]

sele_days = [1563,1657,1713,1724] #,1724: China market (but lost Xiaomi)
for j in sele_days:
    rpos.inspect_attn_one_smp(trials,data,idx=j,news_cate = 'goog')
```

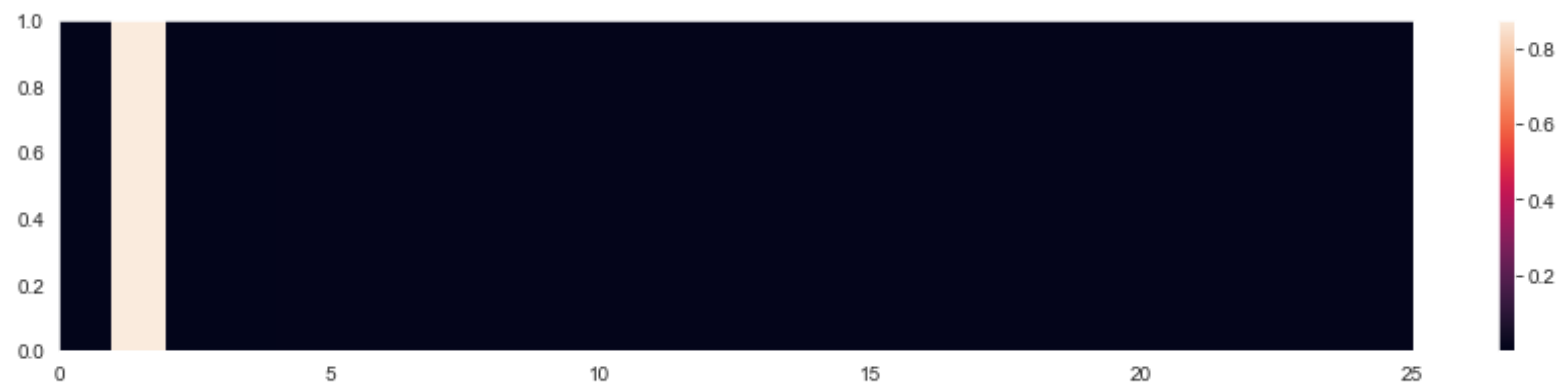


```
== Sample Idx = 1563, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.002 0.874 0.      0.001 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006  
 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006  
 0.006]
```

```
 1 | 0.00 | short-sellers circle stocks as confidence wavers | False 2013-0  
1-09  
 2 | 0.87 | google drops key patent claims against microsoft | True 2013-01  
-09  
 3 | 0.00 | alcoa results lifts shares; dollar up vs. yen | False 2013-0  
1-09  
 4 | 0.00 | wall street rises after alcoa reports earnings | False 2013-0  
1-09
```

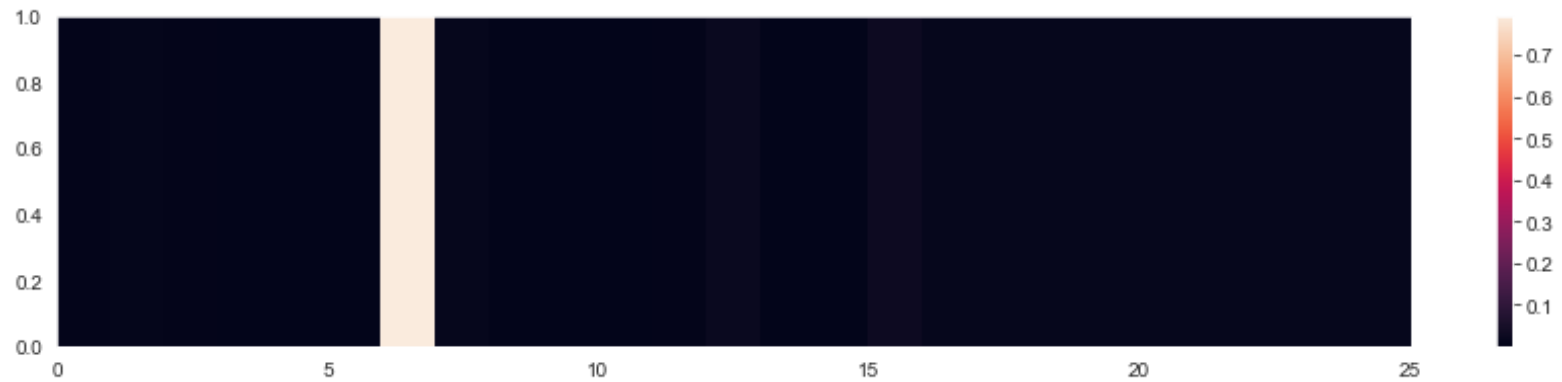


```
== Sample Idx = 1657, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.004 0.008 0.004 0.002 0.001 0.002 0.8    0.01  0.002 0.002 0.002 0.004  
 0.019 0.001 0.001 0.026 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012  
 0.012]
```

```
 1 | 0.00 |                market turbulence poses first serious test for abenomics | False 2013-0  
5-24  
 2 | 0.01 |                private consumption helps german economy to meager growth | False 2013-0  
5-24  
 3 | 0.00 | german q2 gdp growth to outpace first quarter considerably - ifo economist | False 20  
13-05-24  
 4 | 0.00 |                fed's bullard wants inflation pickup before tapering qe | False 2013-0  
5-24  
 5 | 0.00 | analysis: german economy to pick up but fall short of traditional pace | False 2013-0  
5-24  
 6 | 0.00 |                rosy china growth forecasts fade on further signs of slowdown | False 2013-0  
5-24  
 7 | 0.80 |                google eyes waze as facebook circles hot web maps property | True 2013-05  
-24  
 8 | 0.01 |                stimulus fears haunt share markets, dollar recovers | False 2013-0  
5-24  
 9 | 0.00 |                wall street posts first weekly loss since mid-april on fed angst | False 2013-0  
5-24  
10 | 0.00 | wall street week ahead: investors look for signs in the rally's break | False 2013-0  
5-24  
11 | 0.00 | wall street week ahead: investors look for signs in the rally's break | False 2013-0  
5-24  
12 | 0.00 |                boj's kuroda says pain from bond yield rise is manageable | False 2013-0  
5-26  
13 | 0.02 |                insight: two things missing on spain's route to recovery | False 2013-0  
5-26  
14 | 0.00 |                economic reality finally cracks market fervor | False 2013-0  
5-26  
15 | 0.00 |                economic reality finally cracks market fervor | False 2013-0  
5-26  
16 | 0.03 |                china profit growth quickens, no harbinger of recovery | False 2013-0  
5-26
```

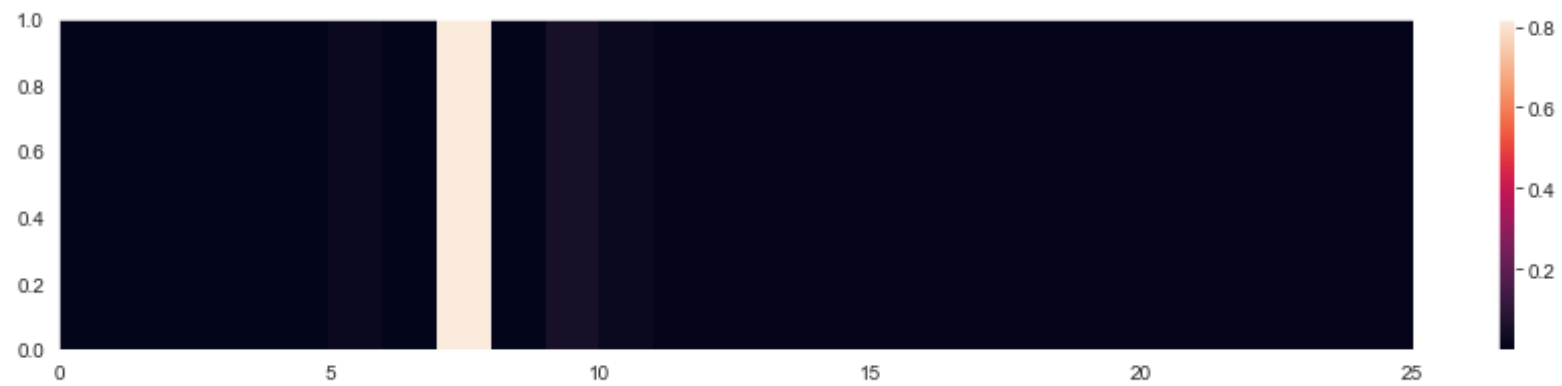


== Sample Idx = 1713, n\_lookback = 5

== attn last: 25

```
[0.    0.001 0.002 0.002 0.001 0.019 0.001 0.793 0.001 0.052 0.024 0.007
 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
 0.007]
```

|    |      |  |  |                  |
|----|------|--|--|------------------|
| 1  | 0.00 |  | france exits recession, beats second quarter gdp forecasts                 | False 2013-08-14 |
| 2  | 0.00 |  | euro zone performance suggests recovery in sight: eu's rehn                | False 2013-08-14 |
| 3  | 0.00 |  | germany, france haul euro zone out of recession                            | False 2013-08-14 |
| 4  | 0.00 |  | yellen seen as likely next fed chair despite summers chatter: reuters poll | False 2013-08-14 |
| 5  | 0.00 |  | u.s. in modest recovery; fed to cut back on qe next month: reuters poll    | False 2013-08-14 |
| 6  | 0.02 |  | j.c. penney shares spike on report sales improving in august               | False 2013-08-14 |
| 7  | 0.00 |  | wall street ends down on fed uncertainty; data boosts europe               | False 2013-08-14 |
| 8  | 0.79 |  | analysis: with balloons and fiber, google experiments in web access        | True 2013-08-14  |
| 9  | 0.00 |  | wall street falls on uncertainty about fed's bond buying                   | False 2013-08-14 |
| 10 | 0.05 |  | apple faces possible may 2014 trial on e-book damages                      | False 2013-08-14 |
| 11 | 0.02 |  | japan government spokesman: no truth pm abe instructed corporate tax cut   | False 2013-08-14 |



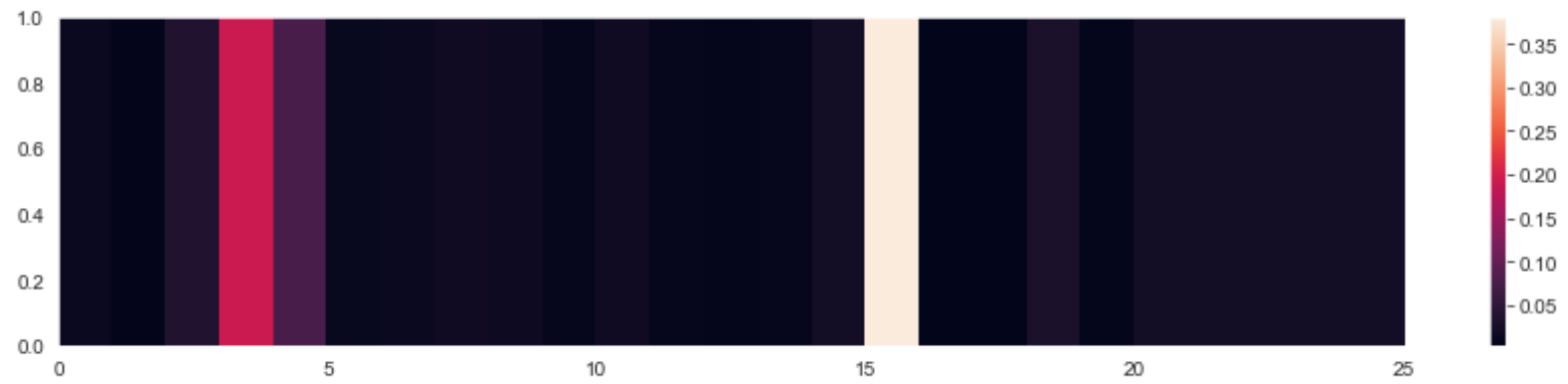
== Sample Idx = 1724, n\_lookback = 5

== attn last: 25

[0.013 0.007 0.033 0.202 0.079 0.01 0.019 0.021 0.017 0.008 0.015 0.011  
0.007 0.008 0.021 0.371 0.003 0.005 0.03 0.009 0.023 0.023 0.023 0.023  
0.023]

|    |  |      |  |   |  |                  |
|----|--|------|--|---|--|------------------|
| 1  |  | 0.01 |  | india pm likely to make statement on economy on friday                    |  | False 2013-08-29 |
| 2  |  | 0.01 |  | boj policymaker warns emerging markets may see more outflows              |  | False 2013-08-29 |
| 3  |  | 0.03 |  | eu's rehn says lenders to step up assessment of greece next month         |  | False 2013-08-29 |
| 4  |  | 0.20 |  | china environment min suspends some approvals for sinopec, cnpc           |  | False 2013-08-29 |
| 5  |  | 0.08 |  | italy must still meet targets after scrapping property tax, says rehn     |  | False 2013-08-29 |
| 6  |  | 0.01 |  | spain's economic slump longer than thought, but easing                    |  | False 2013-08-29 |
| 7  |  | 0.02 |  | india's central bank should consider monetizing gold: trade minister      |  | False 2013-08-29 |
| 8  |  | 0.02 |  | rupee falls in front of slowing indian economy                            |  | False 2013-08-29 |
| 9  |  | 0.02 |  | india rupee bounces from record low, pm may address parliament on economy |  | False 2013-08-29 |
| 10 |  | 0.01 |  | exclusive: india might buy gold from citizens to ease rupee crisis        |  | False 2013-08-29 |
| 11 |  | 0.02 |  | spain's recession longer than thought, but close to ending                |  | False 2013-08-29 |
| 12 |  | 0.01 |  | india finance minister asks banks to ensure credit flow to industry       |  | False 2013-08-29 |
| 13 |  | 0.01 |  | easing stimulus, oversupply to weigh on oil next year: reuters poll       |  | False 2013-08-29 |
| 14 |  | 0.01 |  | exclusive: india might buy gold from citizens to ease rupee crisis        |  | False 2013-08-29 |
| 15 |  | 0.02 |  | india rupee bounces from record low; government seeks solutions           |  | False 2013-08-29 |
| 16 |  | 0.37 |  | china's xiaomi poaches google's barra to power global drive               |  | True 2013-08-29  |
| 17 |  | 0.00 |  | gdp growth beats forecasts; may boost case for fed move                   |  | False 2013-08-29 |
| 18 |  | 0.00 |  | wall street rises on economy, but syria concerns limit gains              |  | False 2013-08-29 |

19 | 0.03 | oil dips as syria action uncertain; dollar rises on data | False 2013-0  
8-29  
20 | 0.01 | boe's carney says uncertainty about rbs' future must end | False 2013-0  
8-29



```
In [5]: reload(rpos)

reload(rba)
DATAFILES = ['GOOGL_00_05.p', 'GOOGL_09_05.p', 'GOOGL_15_05.p', 'GOOGL_19_05.p', 'GOOGL_23_05.p']
DNN_MODEL='AsyncRNN'

reload(rba)
# (df,best_param,data) = rba.hyperopt_postprocess(DATAFILES[0],DNN_MODEL)
i = 16

trials={}
trials['res'] = {}
trials['res']['attnA_tnvate'] = df['attnA_tnvate'][i]
trials['res']['y'] = df['y'][i]
trials['res']['ypred'] = df['ypred'][i]

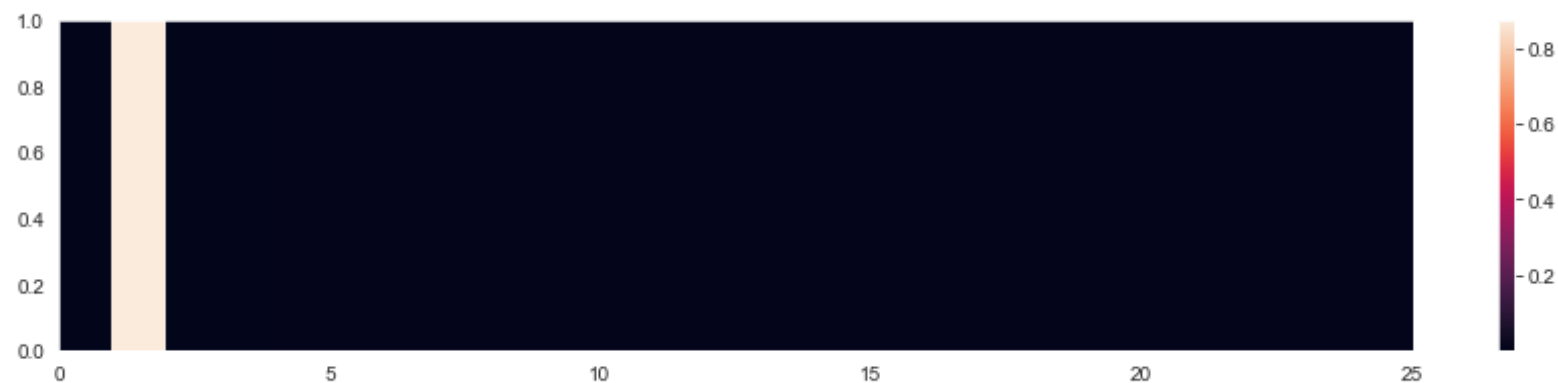
st = 1561
for j in range(st,st+200):
    rpos.inspect_attn_one_smp(trials,data,idx=j,news_cate = 'goog')
```

```
== Sample Idx = 1563, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.002 0.874 0.      0.001 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006  
 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006  
 0.006]
```

```
 1 | 0.00 |          short-sellers circle stocks as confidence wavers | False 2013-0  
1-09  
 2 | 0.87 |          google drops key patent claims against microsoft | True 2013-01  
-09  
 3 | 0.00 |          alcoa results lifts shares; dollar up vs. yen | False 2013-0  
1-09  
 4 | 0.00 |          wall street rises after alcoa reports earnings | False 2013-0  
1-09
```



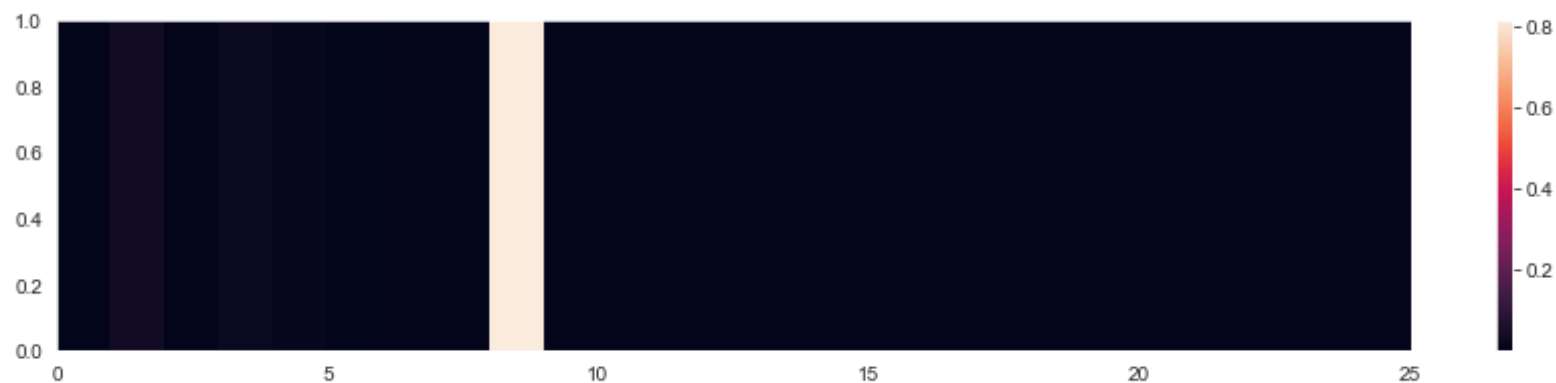


```
== Sample Idx = 1569, n_lookback = 5
```

```
== attn last: 25
```

```
[0. 0.042 0.004 0.021 0.013 0.001 0.003 0.005 0.798 0.007 0.007 0.007  
0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007  
0.007]
```

```
1 | 0.00 | dollar squeeze adds to economic hardship in sudan | False 2013-0  
1-17  
2 | 0.04 | jobless claims drop to five-year low | False 2013-0  
1-17  
3 | 0.00 | housing starts climb to highest rate since june 2008 | False 2013-0  
1-17  
4 | 0.02 | instant view: housing starts up, jobless claims fall | False 2013-0  
1-17  
5 | 0.01 | analysis: preparing for the unthinkable: could markets handle a u.s. default? | False  
2013-01-17  
6 | 0.00 | global equities rally on u.s. data, yen weakens | False 2013-0  
1-17  
7 | 0.00 | housing, labor data provide upbeat signs on economy | False 2013-0  
1-17  
8 | 0.01 | housing, job data push s&p to five-year high; intel down late | False 2013-0  
1-17  
9 | 0.80 | company emails are key in apple, google hiring case, judge says | True 2013-01  
-17
```

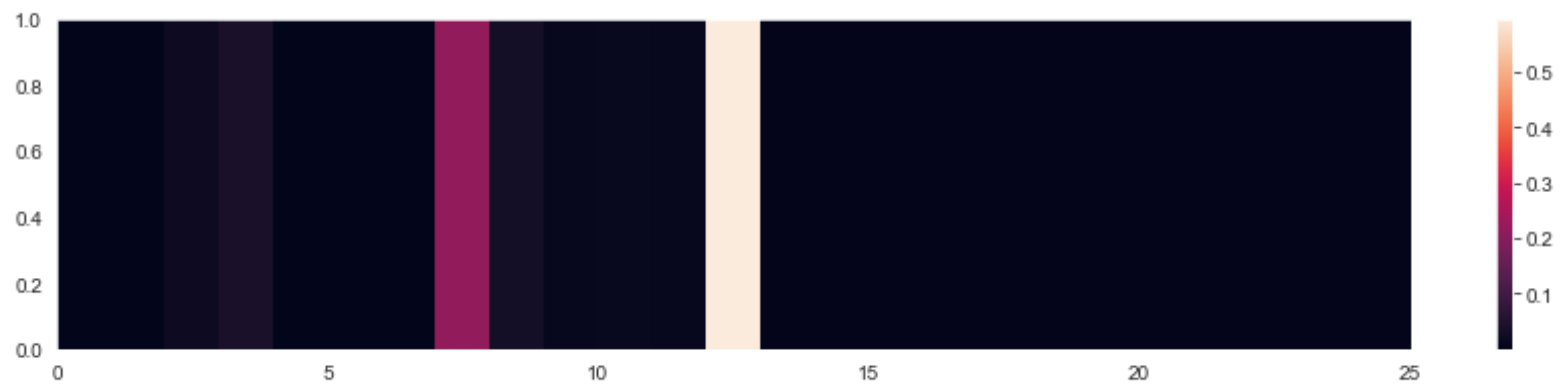


```
== Sample Idx = 1571, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.      0.001 0.018 0.034 0.001 0.001 0.001 0.179 0.032 0.014 0.021 0.014  
0.49   0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016  
0.016]
```

```
1 | 0.00 |           analysis: no respite for euro zone in long rebalancing slog | False 2013-0  
1-22  
2 | 0.00 | japan government welcomes boj easing steps towards 2 percent inflation | False 2013-0  
1-22  
3 | 0.02 |           japan government panel: need to achieve primary budget surplus | False 2013-0  
1-22  
4 | 0.03 |           instant view: existing home sales fall in december | False 2013-0  
1-22  
5 | 0.00 |           german exporters fear devaluations round after boj moves | False 2013-0  
1-22  
6 | 0.00 |           bank of japan in boldest attempt yet to revive economy | False 2013-0  
1-22  
7 | 0.00 |           home resales fall, housing recovery still on track | False 2013-0  
1-22  
8 | 0.18 | instant view: google puts up better than expected quarterly numbers | True 2013-01  
-22  
9 | 0.03 |           bank of japan to buy assets, s&p 500 sets new five-year high | False 2013-0  
1-22  
10 | 0.01 | google's fourth-quarter results shine after ad rate decline slows | True 2013-01  
-22  
11 | 0.02 |           banks, commodity stocks lift s&p 500 to five-year high | False 2013-0  
1-22  
12 | 0.01 | google's fourth-quarter results shine after ad rate decline slows | True 2013-01  
-22  
13 | 0.49 | steve jobs threatened patent suit to enforce no-hire policy: filing | True 2013-01  
-22
```



== Sample Idx = 1579, n\_lookback = 5

== attn last: 25

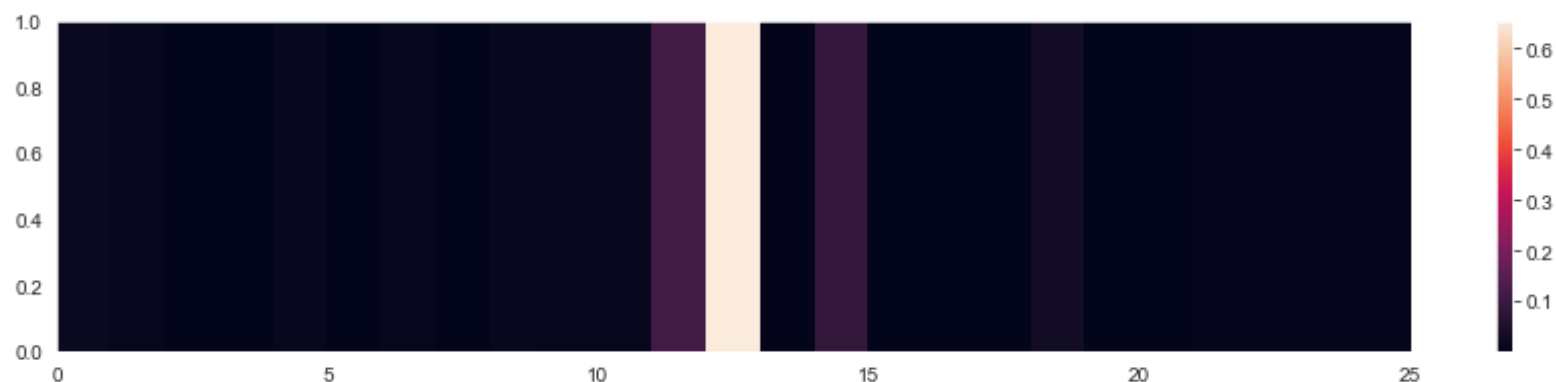
[0.018 0.009 0. 0.001 0.012 0.003 0.009 0. 0.01 0.008 0.008 0.1  
0.662 0.005 0.095 0. 0.001 0.001 0.032 0. 0.001 0.006 0.006 0.006  
0.006]

|           |   |              |
|-----------|---|--------------|
| 1   0.02  | china data signals capital outflows in 2012                           | False 2013-0 |
| 2-01      |   |              |
| 2   0.01  | china january pmis signal mild recovery in place                      | False 2013-0 |
| 2-01      |   |              |
| 3   0.00  | euro zone inflation nears ecb goal, record joblessness                | False 2013-0 |
| 2-01      |   |              |
| 4   0.00  | manufacturing growth quickens in january: markit                      | False 2013-0 |
| 2-01      |   |              |
| 5   0.01  | instant view: january nonfarm payrolls rose by 157,000                | False 2013-0 |
| 2-01      |   |              |
| 6   0.00  | fed's dudley says global economy gradually improving                  | False 2013-0 |
| 2-01      |   |              |
| 7   0.01  | white house says jobs report shows signs of economic growth           | False 2013-0 |
| 2-01      |   |              |
| 8   0.00  | consumer sentiment gains in january on fiscal deal optimism           | False 2013-0 |
| 2-01      |   |              |
| 9   0.01  | u.s. manufacturing surges, chinese recovery more modest               | False 2013-0 |
| 2-01      |   |              |
| 10   0.01 | prices seesaw after jobless and manufacturing data                    | False 2013-0 |
| 2-01      |   |              |
| 11   0.01 | google moves closer to resolving eu investigation                     | True 2013-02 |
| -01       |   |              |
| 12   0.10 | apple edges out samsung for mobile phone sales lead in fourth quarter | False 2013-0 |
| 2-01      |   |              |
| 13   0.66 | exxon, chevron earnings boosted by refining margins                   | False 2013-0 |
| 2-01      |   |              |
| 14   0.01 | jobs, factory data point to steady economic growth                    | False 2013-0 |
| 2-01      |   |              |
| 15   0.10 | hiring at construction sites shifts into higher gear                  | False 2013-0 |
| 2-01      |   |              |
| 16   0.00 | stocks climb on factory, u.s. jobs data; euro jumps, yen slumps       | False 2013-0 |
| 2-01      |   |              |
| 17   0.00 | wall street surges to five-year highs; dow ends above 14,000          | False 2013-0 |
| 2-01      |   |              |
| 18   0.00 | "great rotation"- a wall street fairy tale?                           | False 2013-0 |
| 2-01      |   |              |

```

19 | 0.03 | china services' slow uptick highlights mildness of recovery | False 2013-0
2-03
20 | 0.00 | japan finance minister aso: weak yen result, not goal of anti-deflation policies | Fa
lse 2013-02-03
21 | 0.00 | france on track to meet 0.8 percent growth target: minister | False 2013-0
2-03
22 | 0.01 | watch what central bankers say, not what they do | False 2013-0
2-03

```



```

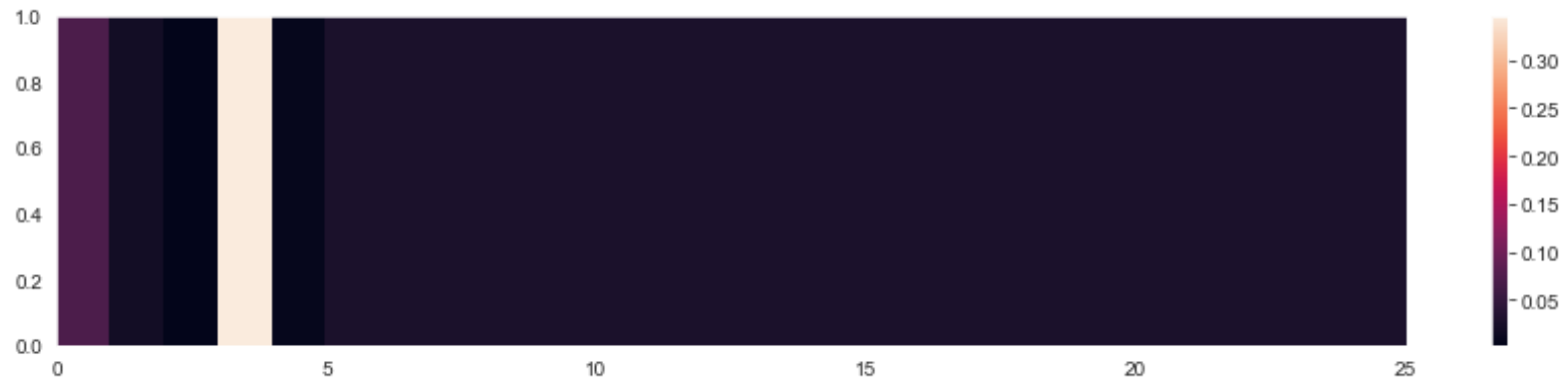
== Sample Idx = 1582, n_lookback = 5

```

```

== attn last: 25
[0.064 0.028 0.004 0.444 0.006 0.023 0.023 0.023 0.023 0.023 0.023 0.023
 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023
 0.023]
1 | 0.06 | analysis: low growth saps support for globalization as g20 meets | False 2013-0
2-06
2 | 0.03 | global stocks rally stalls; euro slips before ecb | False 2013-0
2-06
3 | 0.00 | wall street ends flat as investors pull back | False 2013-0
2-06
4 | 0.44 | google plans to litigate u.s. tax dispute with irs | True 2013-02
-06
5 | 0.01 | analysis: even brief spending cuts could hit u.s. economy hard | False 2013-0
2-06

```

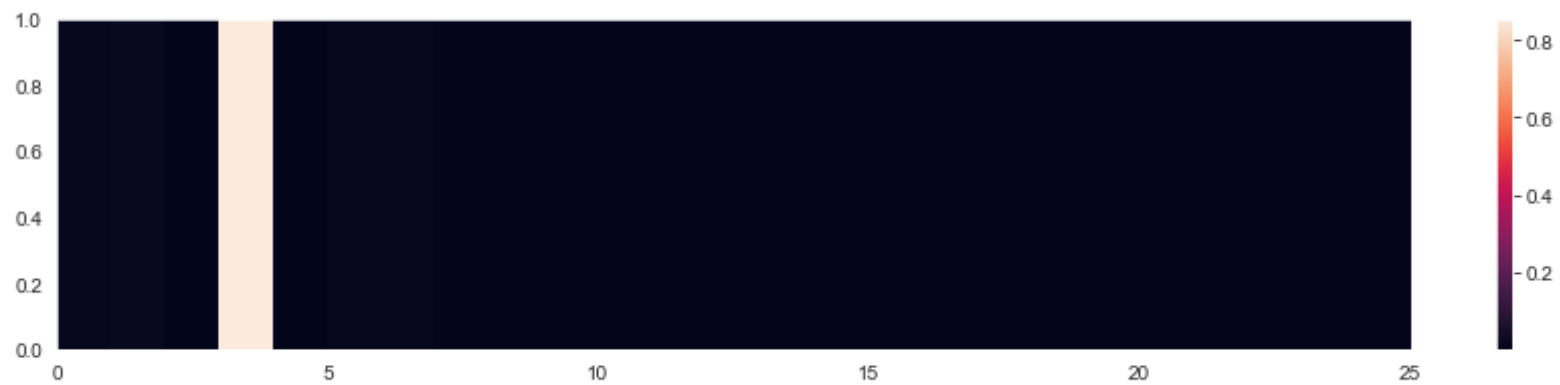


== Sample Idx = 1583, n\_lookback = 5

== attn last: 25

```
[0.01  0.02  0.      0.814 0.001 0.011 0.011 0.007 0.007 0.007 0.007 0.007
 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
 0.007]
```

|          |  |
|----------|--|
| 1   0.01 | einhorn says apple has "depression mentality": cnbc   False 2013-02-07           |
| 2   0.02 | jobless claims point to healing in labor market   False 2013-02-07               |
| 3   0.00 | euro slumps after ecb meeting, shares dip   False 2013-02-07                     |
| 4   0.81 | judge narrows google patent suit against microsoft   True 2013-02-07             |
| 5   0.00 | wall street ends lower on renewed euro zone fears   False 2013-02-07             |
| 6   0.01 | einhorn sues apple, marks biggest investor challenge in years   False 2013-02-07 |
| 7   0.01 | einhorn sues apple, marks biggest investor challenge in years   False 2013-02-07 |



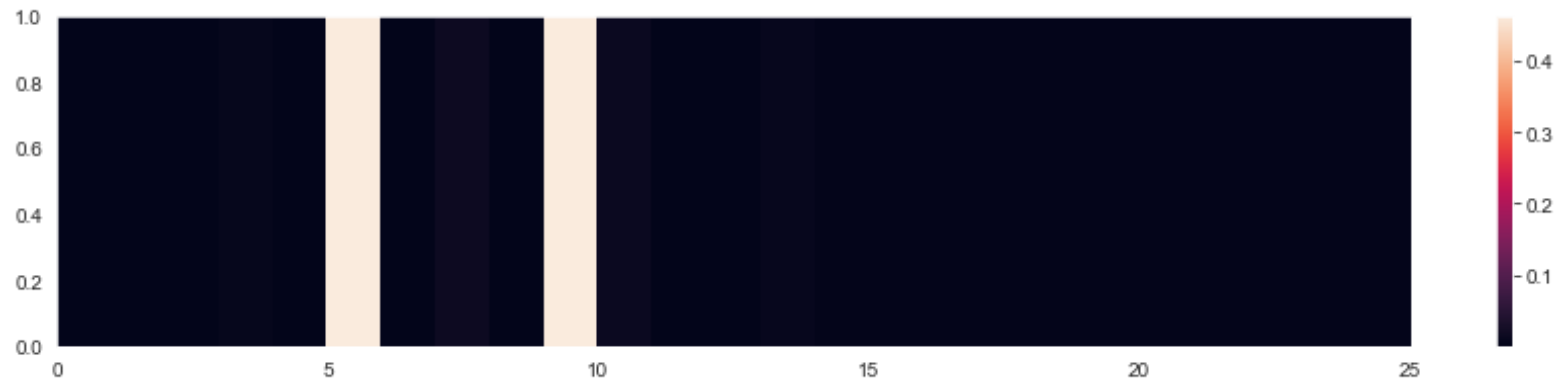
```
== Sample Idx = 1584, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.    0.    0.    0.008 0.001 0.425 0.002 0.022 0.002 0.425 0.02  0.002  
 0.001 0.013 0.006 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007  
 0.007]
```

|      |  |      |  |   |  |              |
|------|--|------|--|---|--|--------------|
| 1    |  | 0.00 |  | greece sees lower budget deficit in 2013, fiscal gap in 2016  |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 2    |  | 0.00 |  | greece sees smaller deficit this year, fiscal gap looms later |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 3    |  | 0.00 |  | economy likely grew in fourth quarter                         |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 4    |  | 0.01 |  | analysis: u.s. funds get gun-shy on europe's periphery        |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 5    |  | 0.00 |  | global shares climb on trade data; yen rallies                |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 6    |  | 0.42 |  | google's schmidt to sell roughly 42 percent of stake          |  | True 2013-02 |
| -08  |  |      |  |   |  |              |
| 7    |  | 0.00 |  | stocks end higher for sixth straight week, tech leads         |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 8    |  | 0.02 |  | einhorn case against apple rests on rarely used legal tactic  |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 9    |  | 0.00 |  | stocks end higher for sixth straight week, tech leads         |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 10   |  | 0.42 |  | google's schmidt to sell roughly 42 percent of stake          |  | True 2013-02 |
| -08  |  |      |  |   |  |              |
| 11   |  | 0.02 |  | einhorn case against apple rests on unusual legal tactic      |  | False 2013-0 |
| 2-08 |  |      |  |   |  |              |
| 12   |  | 0.00 |  | ecb's visco says markets watching italy closely               |  | False 2013-0 |
| 2-09 |  |      |  |   |  |              |
| 13   |  | 0.00 |  | opposition slams venezuela devaluation, shoppers fret         |  | False 2013-0 |
| 2-09 |  |      |  |   |  |              |
| 14   |  | 0.01 |  | g20 to skirt potholes and follow growth signposts             |  | False 2013-0 |
| 2-10 |  |      |  |   |  |              |
| 15   |  | 0.01 |  | insight: apple and samsung, frenemies for life                |  | False 2013-0 |
| 2-10 |  |      |  |   |  |              |



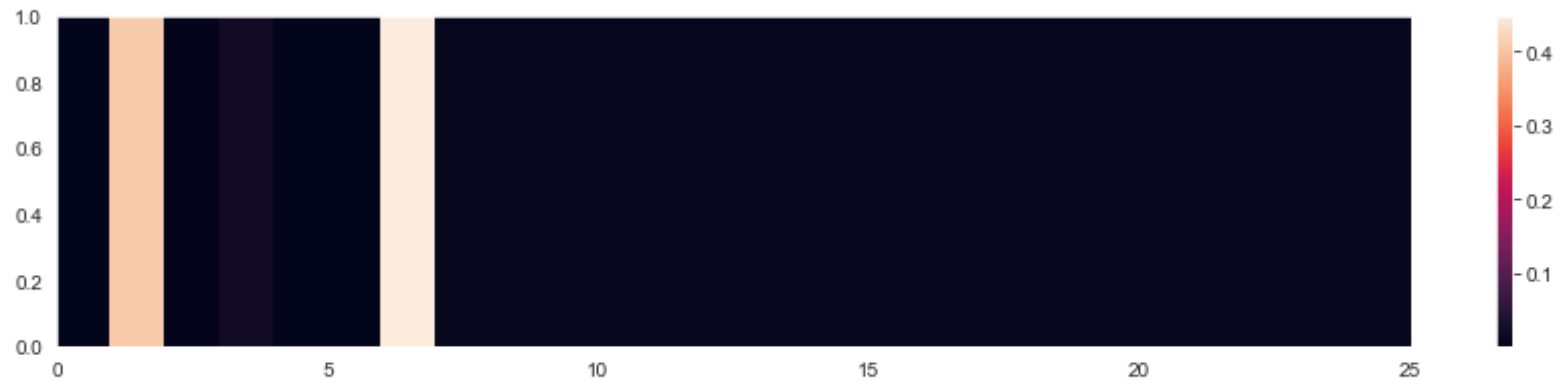


== Sample Idx = 1587, n\_lookback = 5

== attn last: 25

```
[0.002 0.429 0.003 0.017 0.002 0.001 0.441 0.006 0.006 0.006 0.006 0.006
 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006 0.006
 0.006]
```

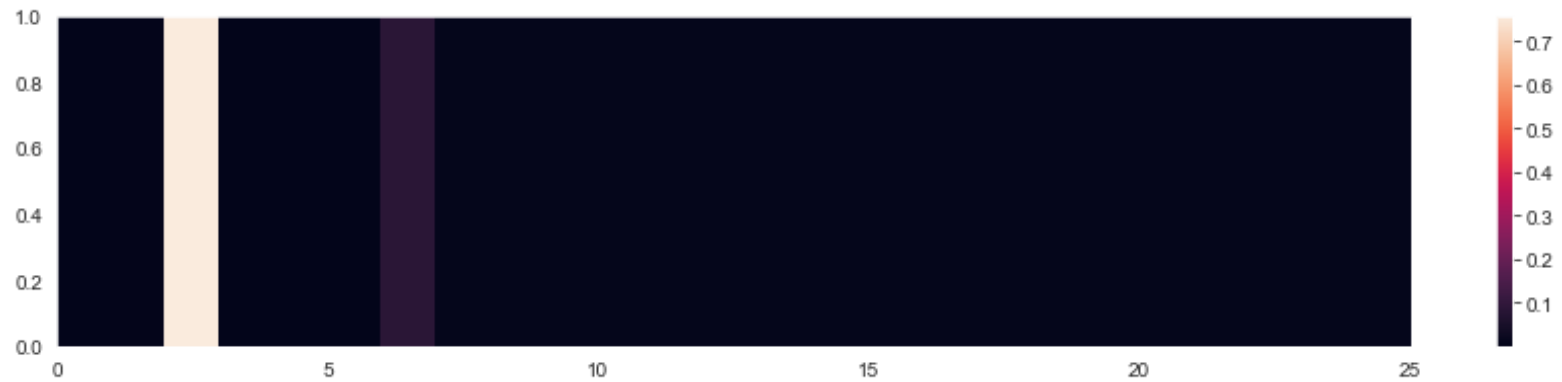
|   |      |   |                  |
|---|------|---|------------------|
| 1 | 0.00 | wall street likely to shrug off obama as investors wait for budget deal | False 2013-02-13 |
| 2 | 0.43 | high stakes if apple e-books antitrust case goes to trial               | False 2013-02-13 |
| 3 | 0.00 | instant view: retail sales growth pauses as higher taxes kick in        | False 2013-02-13 |
| 4 | 0.02 | another investor sues apple, taking a page from einhorn playbook        | False 2013-02-13 |
| 5 | 0.00 | wall street pauses after rally to five-year high                        | False 2013-02-13 |
| 6 | 0.00 | yen flat as investors eye g20, s&p touches new high                     | False 2013-02-13 |
| 7 | 0.44 | google hits back against bt with patent lawsuits                        | True 2013-02-13  |



== Sample Idx = 1595, n\_lookback = 5

== attn last: 25

```
[0.002 0.002 0.69 0.001 0.001 0. 0.072 0.013 0.013 0.013 0.013 0.013
 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013 0.013
 0.013]
 1 | 0.00 | home prices climb in december, best yearly gain since 2006 | False 2013-0
2-26
 2 | 0.00 | bernanke defends stimulus; confidence, housing up | False 2013-0
2-26
 3 | 0.69 | google and spain wrestle over eu privacy law | True 2013-02
-26
 4 | 0.00 | home prices cap year with biggest rise since 2006 | False 2013-0
2-26
 5 | 0.00 | wall street rebounds on bernanke comments, data | False 2013-0
2-26
 6 | 0.00 | italy vote hits world stocks; bernanke lifts wall street | False 2013-0
2-26
 7 | 0.07 | hyundai agrees to settle fuel economy cases; kia weighs options | False 2013-0
2-26
```

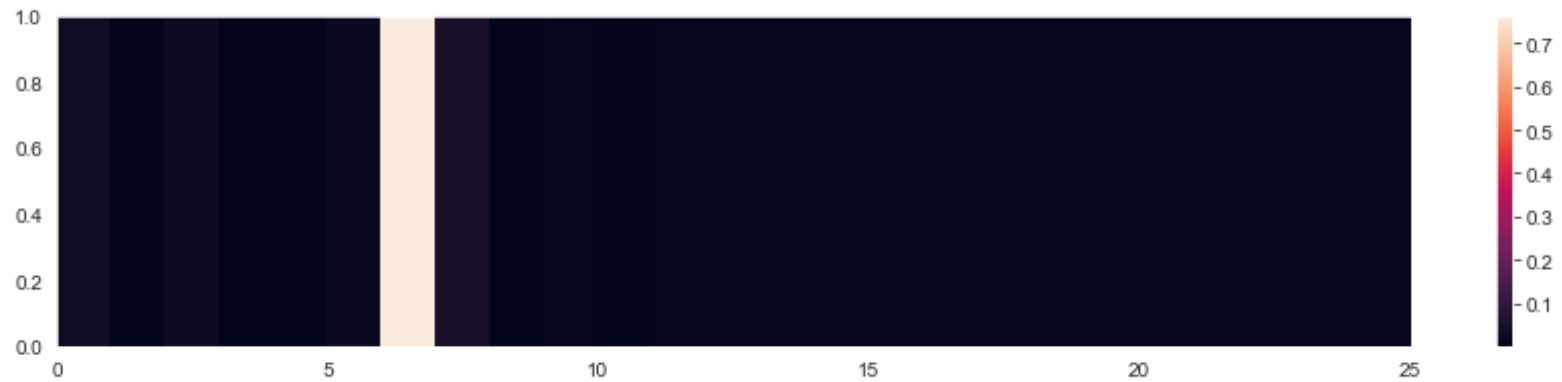


```
== Sample Idx = 1620, n_lookback = 5
```

```
==      attn last:      25
```

```
[0.027 0.001 0.026 0.001 0.001 0.017 0.712 0.047 0.001 0.006 0.001 0.011  
0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011  
0.011]
```

|    |      |  |       |            |
|----|------|--|-------|------------|
| 1  | 0.03 | china march services pmis hit multi-month highs                        | False | 2013-04-03 |
| 2  | 0.00 | analysis: belarus tones down - but sticks to pre-crisis policies       | False | 2013-04-03 |
| 3  | 0.03 | mortgage applications fell last week: mba                              | False | 2013-04-03 |
| 4  | 0.00 | indian pm says downturn passing, asks industrialists for faith         | False | 2013-04-03 |
| 5  | 0.00 | service sector weakest growth in seven months in march: ism            | False | 2013-04-03 |
| 6  | 0.02 | analysis: bailout sends cyprus on uncertain quest for new growth model | False | 2013-04-03 |
| 7  | 0.71 | companies hire fewer in march, service sector growth slows             | False | 2013-04-03 |
| 8  | 0.05 | google to sell second-gen nexus 7 tablet from july: sources            | True  | 2013-04-03 |
| 9  | 0.00 | analysis: supply crunch to take steam out of home sales                | False | 2013-04-03 |
| 10 | 0.01 | global shares, oil fall sharply on u.s. growth concern                 | False | 2013-04-03 |
| 11 | 0.00 | wall street drops on signs of weak economy, north korea                | False | 2013-04-03 |

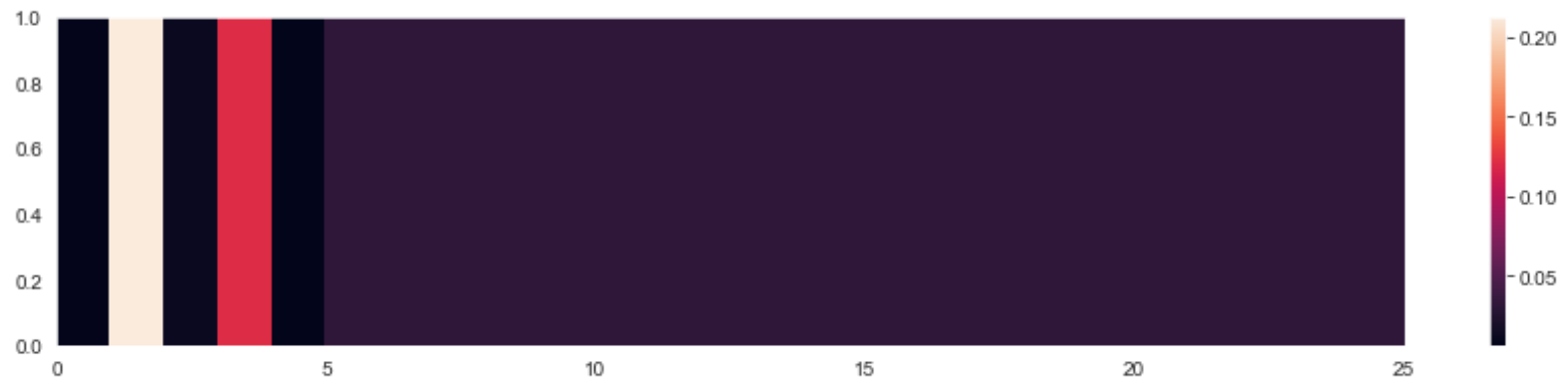


== Sample Idx = 1624, n\_lookback = 5

== attn last: 25

```
[0.007 0.191 0.011 0.109 0.008 0.034 0.034 0.034 0.034 0.034 0.034 0.034
 0.034 0.034 0.034 0.034 0.034 0.034 0.034 0.034 0.034 0.034 0.034 0.034
 0.034]
```

|          |  |                  |
|----------|--|------------------|
| 1   0.01 | easing food prices, mild recovery cool china march inflation | False 2013-04-09 |
| 2   0.19 | microsoft, nokia demand eu action over google's android      | True 2013-04-09  |
| 3   0.01 | hiring rate increases modestly in february                   | False 2013-04-09 |
| 4   0.11 | mexican manufacturing: from sweatshops to high-tech motors   | False 2013-04-09 |
| 5   0.01 | global stocks rise, helped by china data; yen gains          | False 2013-04-09 |

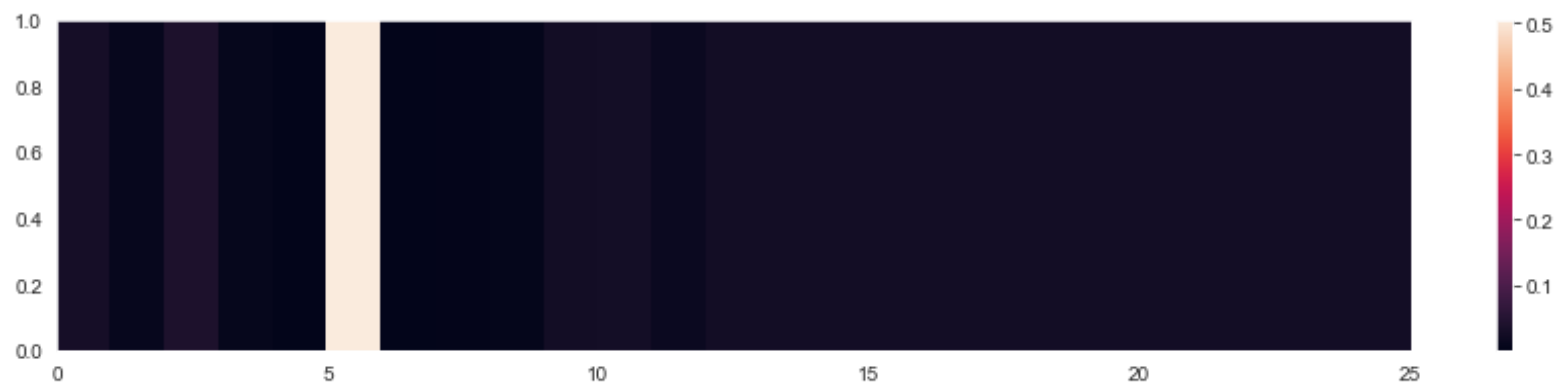


```
== Sample Idx = 1628, n_lookback = 5
```

```
== attn last: 25
```

```
[0.023 0.01 0.04 0.008 0.001 0.562 0. 0.003 0.005 0.024 0.031 0.015  
0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021  
0.021]
```

```
1 | 0.02 | analysis: canadians losing faith in economic "miracle" | False 2013-0  
4-15  
2 | 0.01 | boj's kuroda: need financial sector support for monetary policy to work | False 2013-  
04-15  
3 | 0.04 | china growth risks in focus as first quarter data falls short | False 2013-0  
4-15  
4 | 0.01 | new york fed manufacturing growth slows in april | False 2013-0  
4-15  
5 | 0.00 | home builder sentiment falls for third month in april: nahb | False 2013-0  
4-15  
6 | 0.56 | google rivals may be quizzed on antitrust offer this week | True 2013-04  
-15  
7 | 0.00 | gold has worst two-day rout in 30 years, stocks drop | False 2013-0  
4-15  
8 | 0.00 | wall street posts worst day since november 7 on gold's drop, boston blasts | False 20  
13-04-15  
9 | 0.01 | sharp drop in gold caught many funds off guard: burbank | False 2013-0  
4-15  
10 | 0.02 | gold investors run for the exits, prices suffer biggest-ever drop | False 2013-0  
4-15  
11 | 0.03 | u.s. gold futures volume hits all-time high as prices collapse | False 2013-0  
4-15  
12 | 0.01 | broad risk flight; gold eyes worst two days since 1983 | False 2013-0  
4-15
```

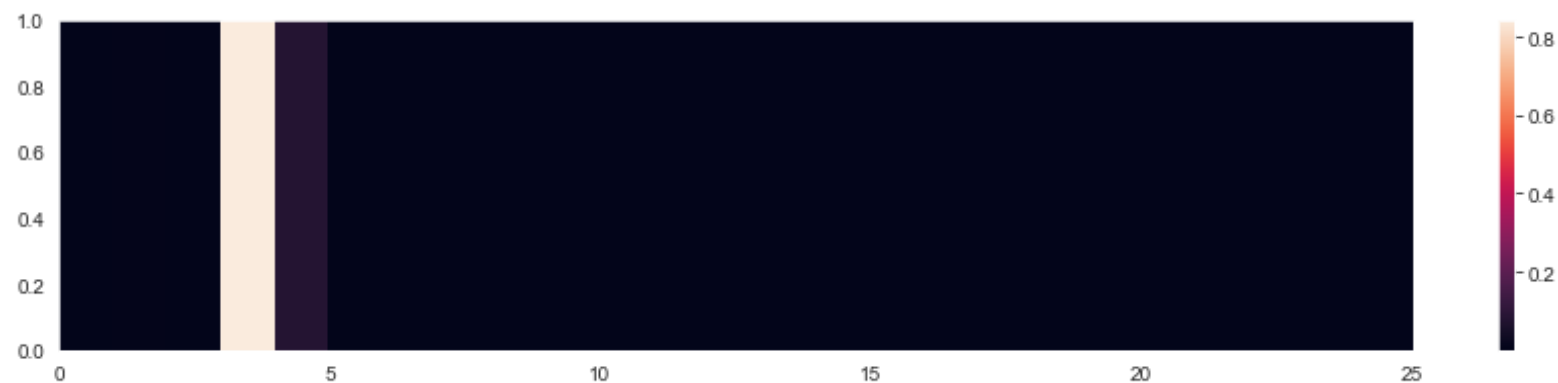


```
== Sample Idx = 1631, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.001 0.004 0.001 0.774 0.087 0.007 0.007 0.007 0.007 0.007 0.007 0.007  
 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007  
 0.007]
```

```
 1 | 0.00 |                bank of england job will put carney to the test | False 2013-0  
4-18  
 2 | 0.00 |                global shares weak after u.s. data, but oil rebounds | False 2013-0  
4-18  
 3 | 0.00 |                wall street falls further, bearish signals mount | False 2013-0  
4-18  
 4 | 0.77 |                google's internet revenue grew 23 percent in first quarter | True 2013-04  
-18  
 5 | 0.09 |                google internet business solid despite motorola losses | True 2013-04  
-18
```

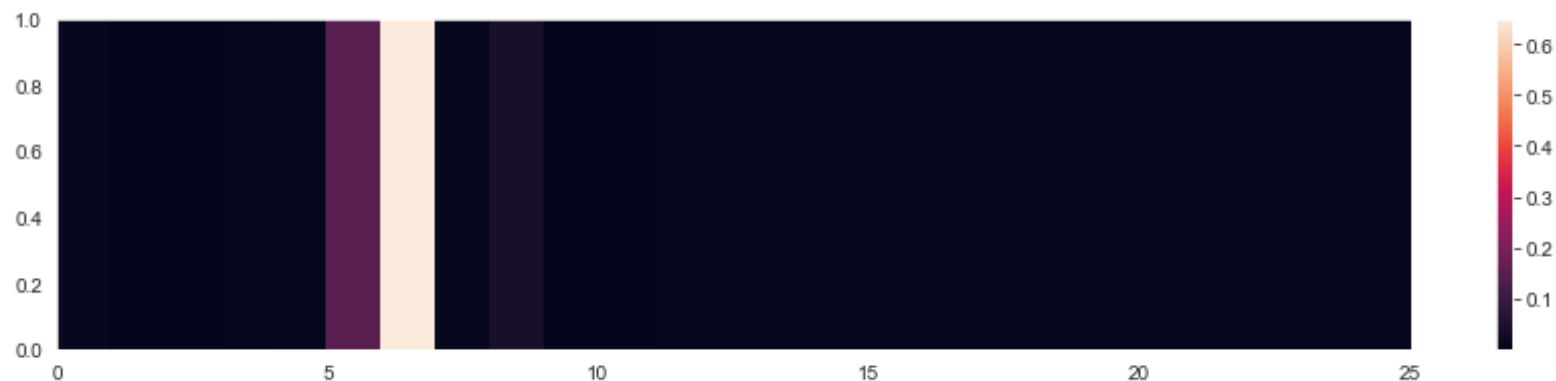


```
== Sample Idx = 1635, n_lookback = 5
```

```
== attn last: 25
```

```
[0.013 0.002 0.004 0.009 0.012 0.182 0.651 0.007 0.036 0.001 0.006 0.005  
0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005 0.005  
0.005]
```

|           |   |
|-----------|---|
| 1   0.01  | apple unlocks more cash for investors as profit slides   False 2013-0     |
| 4-24      |   |
| 2   0.00  | boj's new price forecasts friday to be credibility test   False 2013-0    |
| 4-24      |   |
| 3   0.00  | analysis: britain's ills on display in rising car sales   False 2013-0    |
| 4-24      |   |
| 4   0.01  | insight: aging deepens debt-laden europe's economic woes   False 2013-0   |
| 4-24      |   |
| 5   0.01  | analysts cut apple targets on profit decline, soft outlook   False 2013-0 |
| 4-24      |   |
| 6   0.18  | apple shares fall as buyback, dividend hike fail to please   False 2013-0 |
| 4-24      |   |
| 7   0.65  | google buys wavii for \$30 million, mirroring yahoo's deal   True 2013-04 |
| -24       |   |
| 8   0.01  | weak durable goods orders point to sluggish economy   False 2013-0        |
| 4-24      |   |
| 9   0.04  | apple's cash plan takes heat off cook, buys him time   False 2013-0       |
| 4-24      |   |
| 10   0.00 | wall street ends mostly flat, procter, at&t tumble   False 2013-0         |
| 4-24      |   |
| 11   0.01 | global shares rise as weak data again backs ecb rate cut   False 2013-0   |
| 4-24      |   |

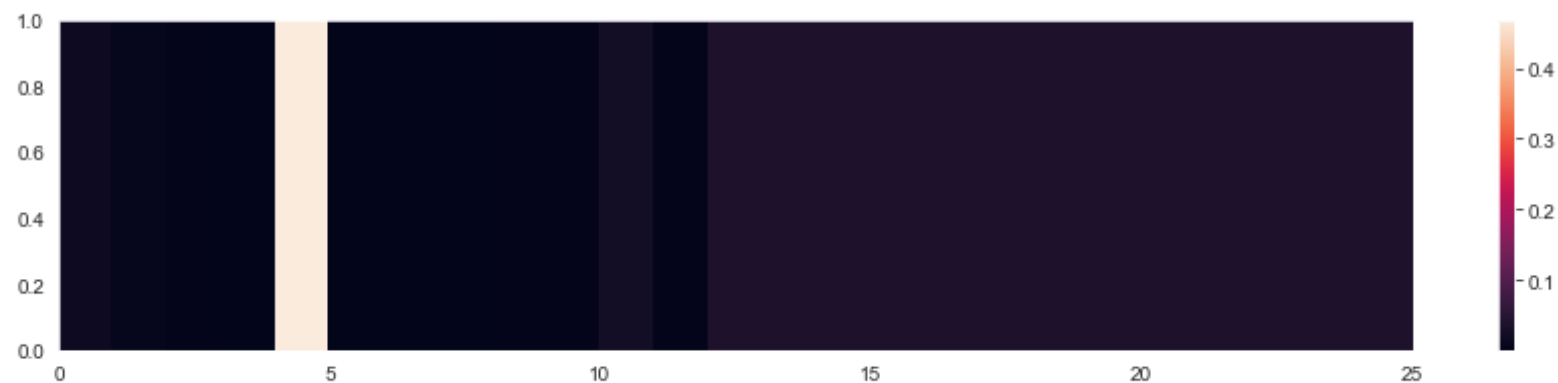


```
== Sample Idx = 1637, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.016 0.007 0.003 0.001 0.445 0.001 0.002 0.002 0.004 0.004 0.022 0.003  
 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038  
 0.038]
```

|      |      |  |   |              |
|------|------|--|---|--------------|
| 1    | 0.02 |  | japan to craft growth strategy, fiscal plan before g8: suga           | False 2013-0 |
| 4-26 |      |  |   |              |
| 2    | 0.01 |  | boj in credibility test as divisions emerge over inflation target     | False 2013-0 |
| 4-26 |      |  |   |              |
| 3    | 0.00 |  | consumer sentiment wanes in april                                     | False 2013-0 |
| 4-26 |      |  |   |              |
| 4    | 0.00 |  | economic growth gauge at 2-year high last week: ecri                  | False 2013-0 |
| 4-26 |      |  |   |              |
| 5    | 0.45 |  | microsoft gets upper hand in first google patent trial                | True 2013-04 |
| -26  |      |  |   |              |
| 6    | 0.00 |  | growth falls short of forecasts, weakness ahead                       | False 2013-0 |
| 4-26 |      |  |   |              |
| 7    | 0.00 |  | dollar falls against the yen; bond yields decline                     | False 2013-0 |
| 4-26 |      |  |   |              |
| 8    | 0.00 |  | wall street dips after gdp but finishes week higher                   | False 2013-0 |
| 4-26 |      |  |   |              |
| 9    | 0.00 |  | wall st week ahead: central banks, data to steer investors            | False 2013-0 |
| 4-26 |      |  |   |              |
| 10   | 0.00 |  | wall street week ahead: central banks, data to steer investors        | False 2013-0 |
| 4-27 |      |  |   |              |
| 11   | 0.02 |  | still stuck on central-bank life support                              | False 2013-0 |
| 4-28 |      |  |   |              |
| 12   | 0.00 |  | japan factory output seen up for fourth straight month, recovery slow | False 2013-0 |
| 4-28 |      |  |   |              |



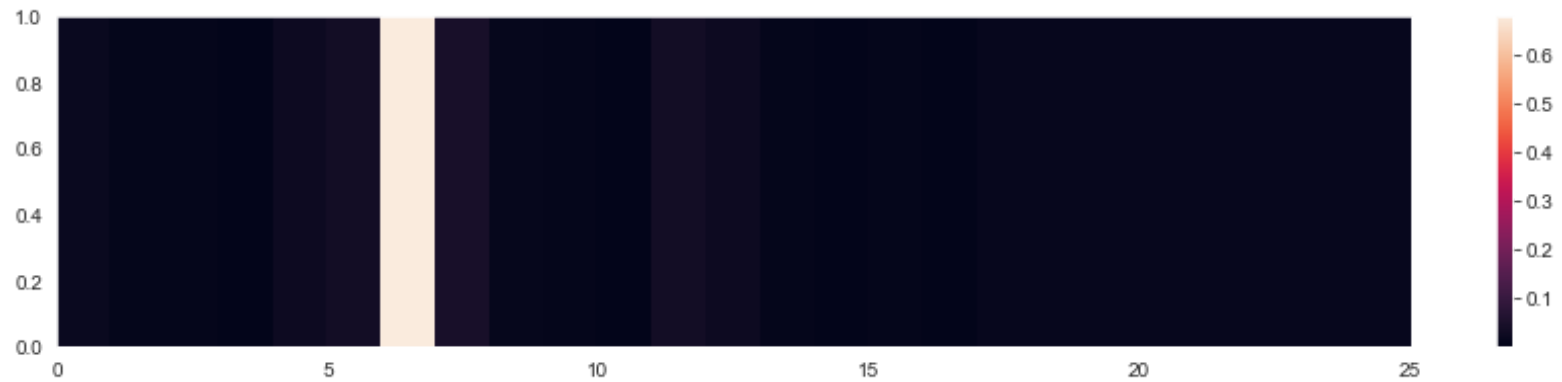


== Sample Idx = 1642, n\_lookback = 5

== attn last: 25

[0.013 0.007 0.007 0.001 0.018 0.029 0.515 0.067 0.008 0.011 0.004 0.029  
0.018 0.011 0.004 0.009 0.001 0.031 0.031 0.031 0.031 0.031 0.031 0.031  
0.031]

|        |  |      |  |  |  |       |            |
|--------|--|------|--|--|--|-------|------------|
| 1      |  | 0.01 |  | u.s. april employment data to point to sluggish economy                  |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 2      |  | 0.01 |  | france to get two more years to cut deficit: eu's rehn                   |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 3      |  | 0.01 |  | france to get two more years to cut deficit: eu's rehn                   |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 4      |  | 0.00 |  | eu sees deeper euro zone recession in 2013, slower deficit cuts          |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 5      |  | 0.02 |  | white house says jobs report shows economy continuing to recover         |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 6      |  | 0.03 |  | instant view: april nonfarm payrolls up by 165,000                       |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 7      |  | 0.52 |  | clients question google's uk tax status: poll                            |  | True  | 2013-05    |
| -03    |  |      |  |  |  |       |            |
| 8      |  | 0.07 |  | dow, s&p 500 close at record levels after jobs report                    |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 9      |  | 0.01 |  | dollar, stocks surge on strong u.s. jobs data                            |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 10     |  | 0.01 |  | job market resilience eases growth concerns                              |  | False | 2013-0     |
| 5-03   |  |      |  |  |  |       |            |
| 11     |  | 0.00 |  | wall street week ahead: few roadblocks to equities' climb after new high |  | False | 2013-05-03 |
| -05-03 |  |      |  |  |  |       |            |
| 12     |  | 0.03 |  | instant view: april nonfarm payrolls up by 165,000                       |  | False | 2013-0     |
| 5-04   |  |      |  |  |  |       |            |
| 13     |  | 0.02 |  | white house says jobs report shows economy continuing to recover         |  | False | 2013-0     |
| 5-04   |  |      |  |  |  |       |            |
| 14     |  | 0.01 |  | job market resilience eases growth concerns                              |  | False | 2013-0     |
| 5-04   |  |      |  |  |  |       |            |
| 15     |  | 0.00 |  | wall street week ahead: few roadblocks to equities' climb after new high |  | False | 2013-05-04 |
| -05-04 |  |      |  |  |  |       |            |
| 16     |  | 0.01 |  | with caution, japan's neighbors welcome 'abonomics'                      |  | False | 2013-0     |
| 5-05   |  |      |  |  |  |       |            |
| 17     |  | 0.00 |  | europe's jobs crisis comes into sharper relief                           |  | False | 2013-0     |
| 5-05   |  |      |  |  |  |       |            |

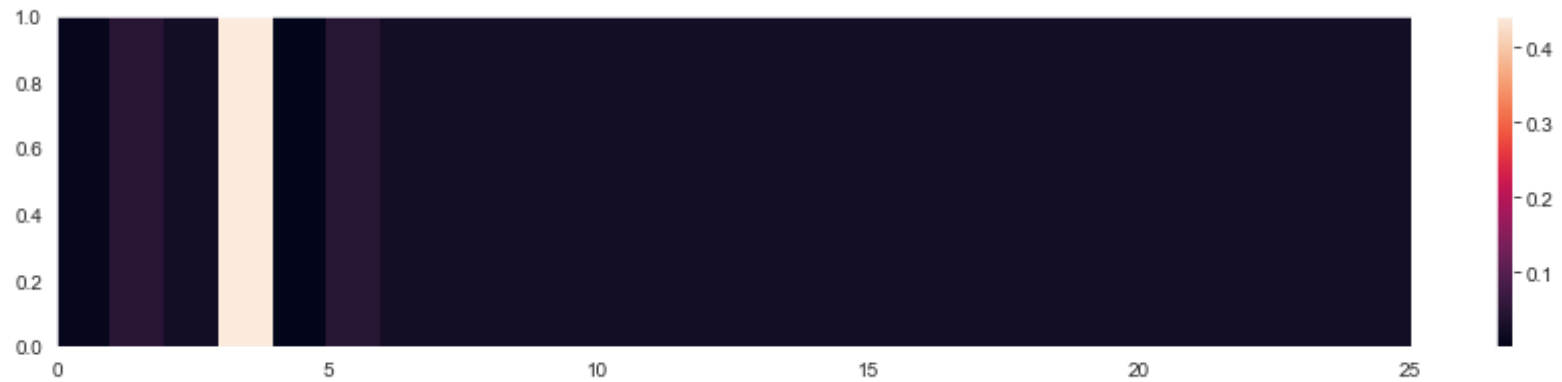


== Sample Idx = 1643, n\_lookback = 5

== attn last: 25

```
[0.003 0.025 0.014 0.212 0.002 0.037 0.025 0.038 0.038 0.038 0.038 0.038
 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038 0.038
 0.038]
```

|   |  |      |  |   |  |                  |
|---|--|------|--|---|--|------------------|
| 1 |  | 0.00 |  | china's unsteady economy seen holding april inflation in check    |  | False 2013-05-06 |
| 2 |  | 0.03 |  | china april export growth seen edging up from low base            |  | False 2013-05-06 |
| 3 |  | 0.01 |  | china services growth slows sharply, adds to recovery risk        |  | False 2013-05-06 |
| 4 |  | 0.21 |  | eu regulator takes aim at google over apple mobile patent lawsuit |  | True 2013-05-06  |
| 5 |  | 0.00 |  | banks lead wall street to record, dollar rises                    |  | False 2013-05-06 |
| 6 |  | 0.04 |  | key dates and milestones in the s&p 500's history                 |  | False 2013-05-06 |
| 7 |  | 0.03 |  | s&p 500 closes at record again; financials, apple lead            |  | False 2013-05-06 |

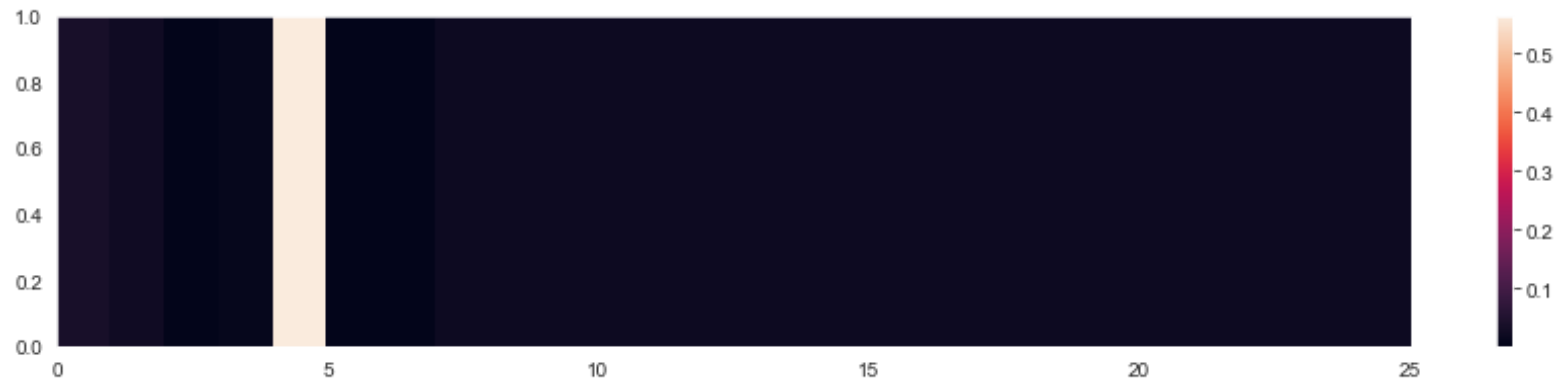


```
== Sample Idx = 1646, n_lookback = 5
```

```
== attn last: 25
```

```
[0.024 0.014 0.002 0.006 0.368 0.001 0.001 0.032 0.032 0.032 0.032 0.032
 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032
 0.032]
```

```
1 | 0.02 | apple supplier pegatron boosts china workforce by 40 percent in second quarter | False 2013-05-09
2 | 0.01 | china inflation data shows central bank policy dilemma | False 2013-05-09
3 | 0.00 | wholesale inventories rise, lifted by cars, machinery | False 2013-05-09
4 | 0.01 | jobless claims hint at strengthening labor market | False 2013-05-09
5 | 0.37 | uk lawmakers set date for google, ernst & young tax grilling | True 2013-05-09
6 | 0.00 | dollar hits 100 yen, stocks slip after rally | False 2013-05-09
7 | 0.00 | s&p 500 slips, snaps five-day streak of record closes | False 2013-05-09
```

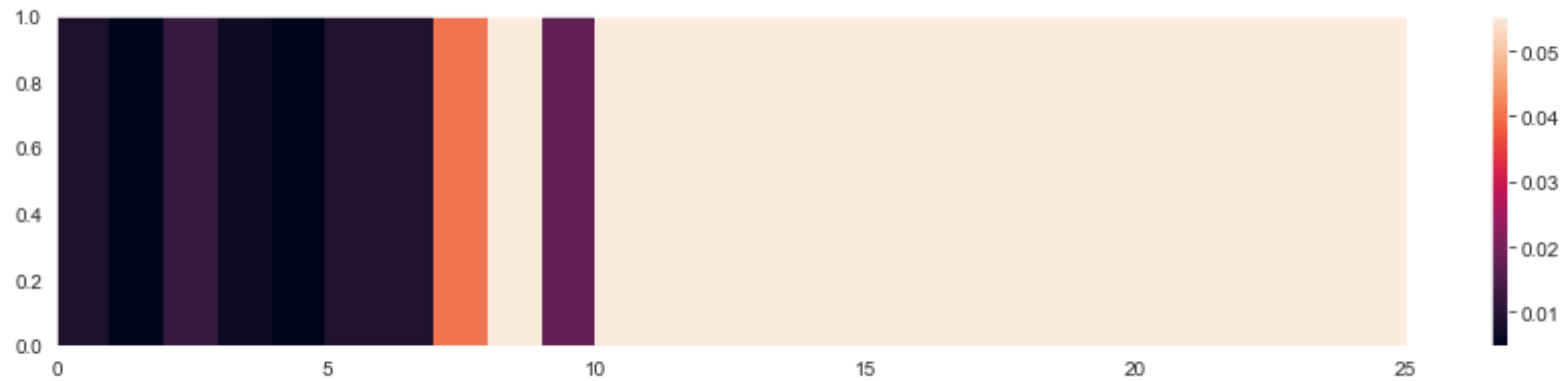


== Sample Idx = 1647, n\_lookback = 5

== attn last: 25

```
[0.008 0.006 0.009 0.006 0.006 0.008 0.008 0.035 0.046 0.015 0.057 0.057
 0.057 0.057 0.057 0.057 0.057 0.057 0.057 0.057 0.057 0.057 0.057 0.057
 0.057]
```

|      |      |   |              |
|------|------|---|--------------|
| 1    | 0.01 | analysis: policy patience seen wearing thin as yen drops              | False 2013-0 |
| 5-10 |      |   |              |
| 2    | 0.01 | yen weakens past 100 to dollar, may fan talk of currency war          | False 2013-0 |
| 5-10 |      |   |              |
| 3    | 0.01 | april budget surplus is biggest in five years                         | False 2013-0 |
| 5-10 |      |   |              |
| 4    | 0.01 | wall street ends up, posts third week of gains                        | False 2013-0 |
| 5-10 |      |   |              |
| 5    | 0.01 | yen hits 4-1/2-year low versus dollar, oil and gold tumble            | False 2013-0 |
| 5-10 |      |   |              |
| 6    | 0.01 | wall street week ahead: 'sell in may and go away?' not this year      | False 2013-0 |
| 5-10 |      |   |              |
| 7    | 0.01 | wall street week ahead: 'sell in may and go away?' not this year      | False 2013-0 |
| 5-11 |      |   |              |
| 8    | 0.03 | analysis: google+ struggles to attract brands, some neglect to update | True 2013-05 |
| -12  |      |   |              |
| 9    | 0.05 | mixed signals for the global economy                                  | False 2013-0 |
| 5-12 |      |   |              |
| 10   | 0.01 | british firms more upbeat on economy, credit scheme helping: lobby    | False 2013-0 |
| 5-12 |      |   |              |

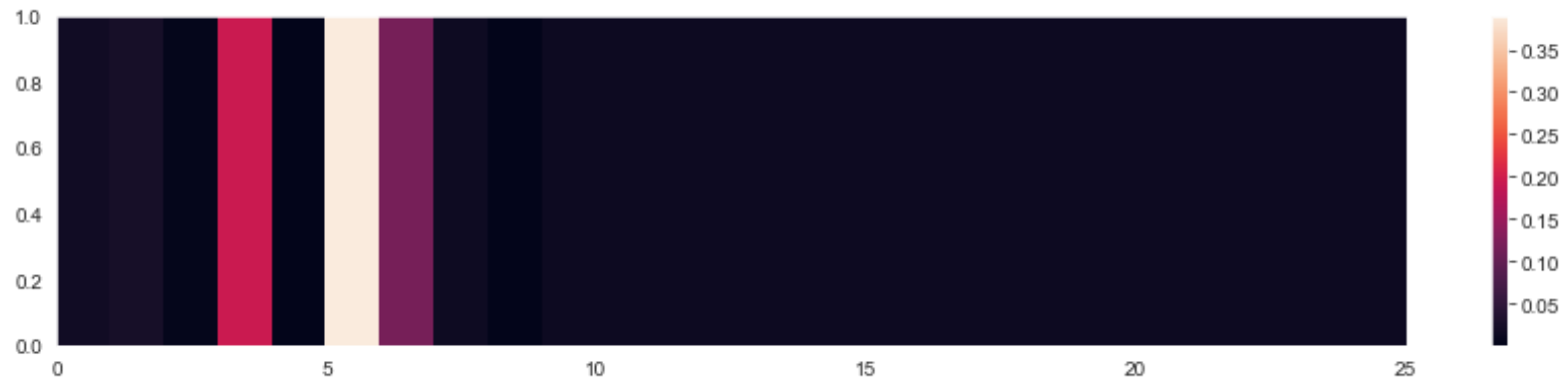


== Sample Idx = 1649, n\_lookback = 5

== attn last: 25

```
[0.016 0.034 0.005 0.183 0.001 0.436 0.132 0.02 0.002 0.011 0.011 0.011
 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011
 0.011]
```

|          |  |              |
|----------|--|--------------|
| 1   0.02 | the asean bid: policy risk to the fore                         | False 2013-0 |
| 5-14     |  |              |
| 2   0.03 | big u.s. data dominates market but new favorites emerging      | False 2013-0 |
| 5-14     |  |              |
| 3   0.00 | import prices fall; lower oil prices to help households        | False 2013-0 |
| 5-14     |  |              |
| 4   0.18 | rivals warn of boost to google dominance from antitrust offer  | True 2013-05 |
| -14      |  |              |
| 5   0.00 | growth in sight for euro zone economy, but no big upturn: poll | False 2013-0 |
| 5-14     |  |              |
| 6   0.44 | bp says is subject to european commission investigation        | False 2013-0 |
| 5-14     |  |              |
| 7   0.13 | eu probes oil majors on price manipulation                     | False 2013-0 |
| 5-14     |  |              |
| 8   0.02 | u.s. stocks jump to record highs, dollar rises                 | False 2013-0 |
| 5-14     |  |              |
| 9   0.00 | wall street jumps as banks lead indexes to new highs           | False 2013-0 |
| 5-14     |  |              |

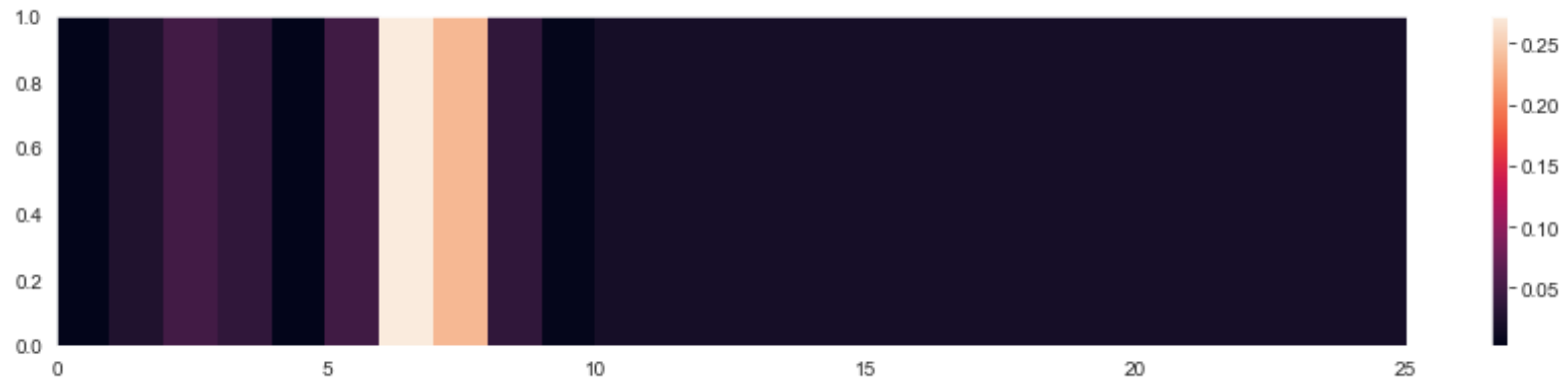


```
== Sample Idx = 1650, n_lookback = 5
```

```
== attn last: 25
```

```
[0.003 0.024 0.045 0.031 0.004 0.055 0.248 0.242 0.031 0.005 0.021 0.021
 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021
 0.021]
```

```
1 | 0.00 | china premier says little room for policy stimulus: media | False 2013-0
5-15
2 | 0.02 | industrial output suffers broad decline in april | False 2013-0
5-15
3 | 0.05 | google to face uk lawmakers again over tax | True 2013-05
-15
4 | 0.03 | factory, wholesale price data flag economy's woes | False 2013-0
5-15
5 | 0.00 | wall street extends winning streak, euro slips | False 2013-0
5-15
6 | 0.05 | dow, s&p 500 end at record highs again, google jumps | False 2013-0
5-15
7 | 0.25 | eu oil price probe puts platts in spotlight | False 2013-0
5-15
8 | 0.24 | google launches streaming music service ahead of apple | True 2013-05
-15
9 | 0.03 | factory, wholesale price data flag economy's woes | False 2013-0
5-15
10 | 0.00 | japan's first quarter growth beats forecasts as first stimulus effects felt | False 2
013-05-15
```

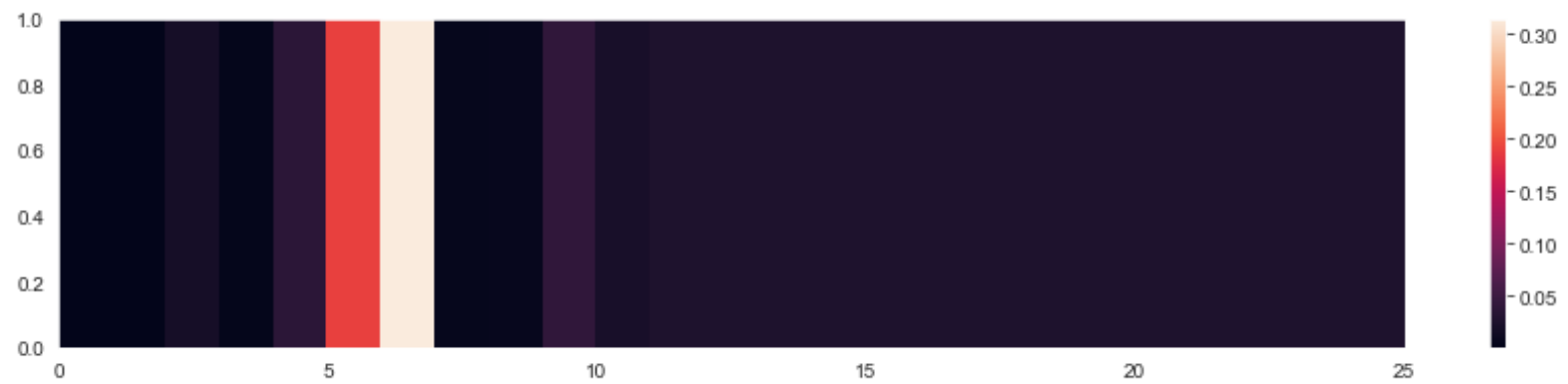


== Sample Idx = 1651, n\_lookback = 5

== attn last: 25

```
[0.001 0.001 0.009 0.004 0.029 0.16 0.18 0.003 0.006 0.024 0.011 0.041
 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.041 0.041
 0.041]
```

| Time Step | Attn | Feature | Text   | Label | Date       |
|-----------|------|---------|--|-------|------------|
| 1         | 0.00 | 6       | japan pm's "third arrow" reforms seen short of overhaul                        | False | 2013-05-16 |
| 2         | 0.00 | 6       | japan's first-quarter growth spurt shows early benefits of abe's policy gamble | False | 2013-05-16 |
| 3         | 0.01 | 6       | jobless claims jump in warning sign for labor market                           | False | 2013-05-16 |
| 4         | 0.00 | 6       | april housing starts plummet from almost 5-year high                           | False | 2013-05-16 |
| 5         | 0.03 | 6       | cisco shares up sharply in relief rally after earnings                         | False | 2013-05-16 |
| 6         | 0.16 | 6       | platts in lockdown as investigators continue oil probe                         | False | 2013-05-16 |
| 7         | 0.18 | 6       | uk lawmakers challenge google's 'smoke and mirrors' on tax                     | True  | 2013-05-16 |
| 8         | 0.00 | 6       | evidence mounts on slower u.s. economic growth                                 | False | 2013-05-16 |
| 9         | 0.01 | 6       | stocks slip, dollar gains on fed policy remarks                                | False | 2013-05-16 |
| 10        | 0.02 | 6       | wall street slips after fed comments, but cisco surges                         | False | 2013-05-16 |
| 11        | 0.01 | 6       | boj may seek ways to calm bond yields, policy on hold                          | False | 2013-05-16 |



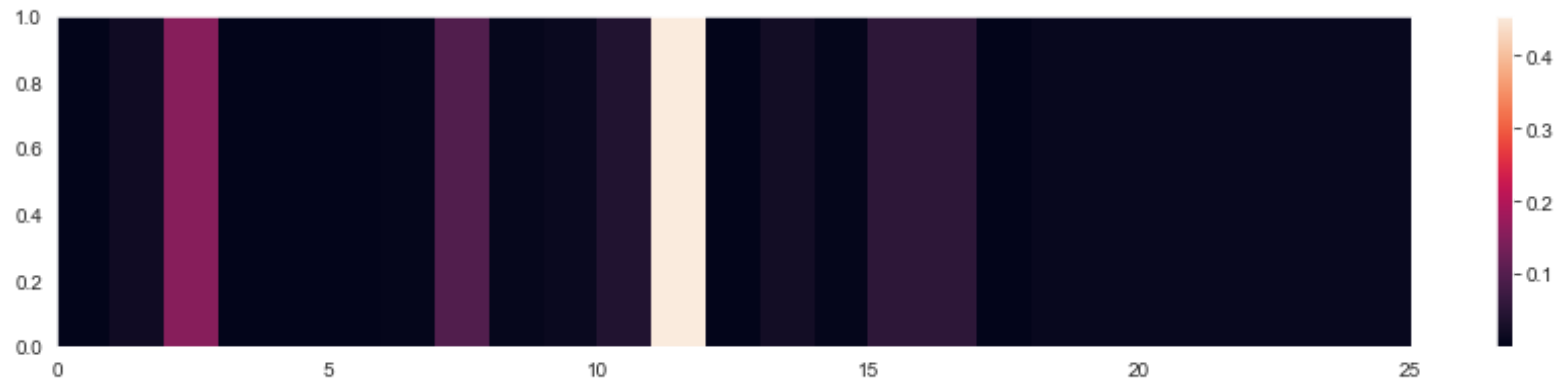


== Sample Idx = 1652, n\_lookback = 5

== attn last: 25

[0. 0.017 0.13 0.001 0. 0.002 0.004 0.084 0.006 0.014 0.032 0.507  
0.001 0.02 0.006 0.057 0.05 0. 0.01 0.01 0.01 0.01 0.01 0.01  
0.01 ]

|    |      |   |                  |
|----|------|---|------------------|
| 1  | 0.00 | japan pm sets targets in latest growth strategy tranche               | False 2013-05-17 |
| 2  | 0.02 | google's schmidt to meet britain's cameron as tax row rages           | True 2013-05-17  |
| 3  | 0.13 | rivals get longer to comment on google eu antitrust offer: source     | True 2013-05-17  |
| 4  | 0.00 | leading economic indicators hint at underlying strength               | False 2013-05-17 |
| 5  | 0.00 | economic growth gauge eased last week: ecri                           | False 2013-05-17 |
| 6  | 0.00 | may consumer sentiment highest in nearly six years                    | False 2013-05-17 |
| 7  | 0.00 | gold falls to one-month low as fed comments lift dollar               | False 2013-05-17 |
| 8  | 0.08 | senator seeks probe into impact of alleged eu oil price manipulation  | False 2013-05-17 |
| 9  | 0.01 | dollar soars, stocks set new highs on fed stimulus exit talk          | False 2013-05-17 |
| 10 | 0.01 | dow, s&p end at records, stocks mark fourth week of gains             | False 2013-05-17 |
| 11 | 0.03 | oil price probe widens, senator wants justice department help         | False 2013-05-17 |
| 12 | 0.51 | nyse cancels irregular trades in anadarko stock: bloomberg            | False 2013-05-17 |
| 13 | 0.00 | wall street week ahead: correction talk gets old as rally sails along | False 2013-05-18 |
| 14 | 0.02 | google's wearable glass gadget: cool or creepy?                       | True 2013-05-18  |
| 15 | 0.01 | boe governor king warns of euro risk to british recovery              | False 2013-05-19 |
| 16 | 0.06 | kuwait replaces oil officials at kpc after \$2.2 billion dow payment  | False 2013-05-19 |
| 17 | 0.05 | analysis: frontier markets booming but risks mounting                 | False 2013-05-19 |
| 18 | 0.00 | analysis: little sign abe can shake up japan's inbound fdi            | False 2013-05-19 |

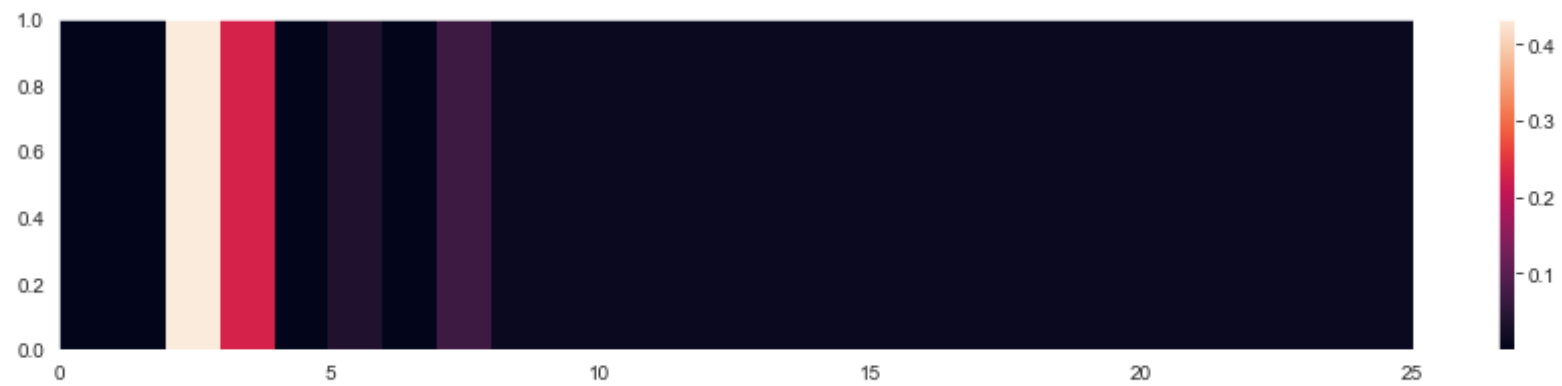


== Sample Idx = 1653, n\_lookback = 5

== attn last: 25

```
[0.001 0.      0.46  0.237 0.001 0.035 0.001 0.064 0.012 0.012 0.012 0.012
 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012
 0.012]
```

|          |  |              |
|----------|--|--------------|
| 1   0.00 | analysis: at margins of shale oil boom, a tempered euphoria    | False 2013-0 |
| 5-20     |  |              |
| 2   0.00 | analysis: little sign abe can shake up japan's inbound fdi     | False 2013-0 |
| 5-20     |  |              |
| 3   0.46 | biggest traders helping eu oil probe, not in it: sources       | False 2013-0 |
| 5-20     |  |              |
| 4   0.24 | britain's cameron tells google and others to play fair on tax  | True 2013-05 |
| -20      |  |              |
| 5   0.00 | shares grind higher, yen rebounds on minister's remarks        | False 2013-0 |
| 5-20     |  |              |
| 6   0.03 | apple to argue for tax reform, defend tax practices on tuesday | False 2013-0 |
| 5-20     |  |              |
| 7   0.00 | wall street ends flat on correction worries                    | False 2013-0 |
| 5-20     |  |              |
| 8   0.06 | apple, congress spar over taxes ahead of tuesday hearing       | False 2013-0 |
| 5-20     |  |              |



== Sample Idx = 1654, n\_lookback = 5

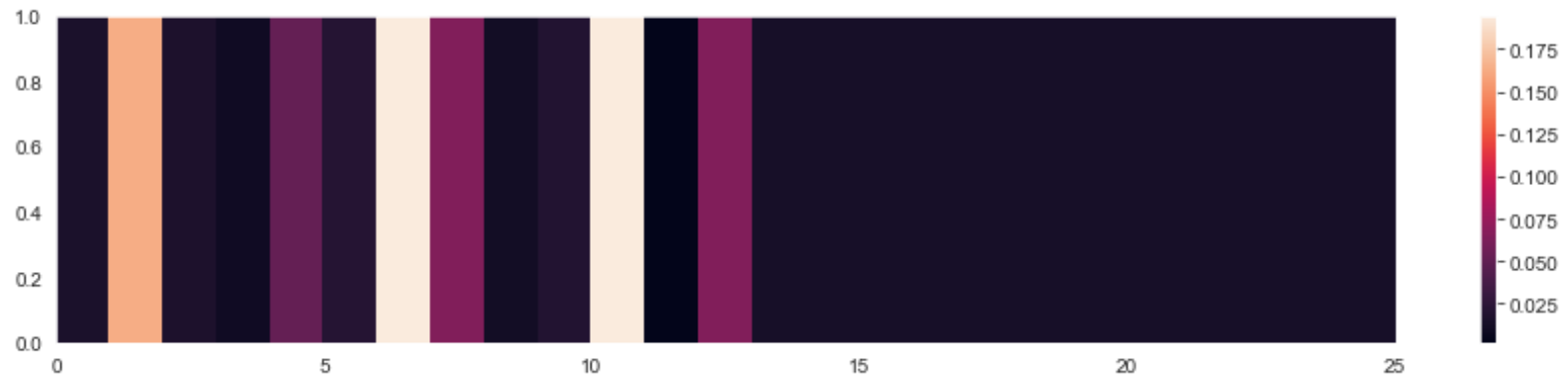
== attn last: 25

[0.016 0.139 0.018 0.009 0.046 0.018 0.23 0.072 0.009 0.021 0.23 0.003

0.072 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01

0.01 ]

|           |   |              |
|-----------|---|--------------|
| 1   0.02  | ireland says not to blame for apple's low tax rate              | False 2013-0 |
| 5-21      |   |              |
| 2   0.14  | ireland says has no special tax deal with apple                 | False 2013-0 |
| 5-21      |   |              |
| 3   0.02  | irish pm says u.s. senate's apple tax claims incorrect          | False 2013-0 |
| 5-21      |   |              |
| 4   0.01  | irish opposition calls for multinationals to face parliament    | False 2013-0 |
| 5-21      |   |              |
| 5   0.05  | global shares end higher as eyes turn to fed                    | False 2013-0 |
| 5-21      |   |              |
| 6   0.02  | the irish loophole behind apple's low tax bill                  | False 2013-0 |
| 5-21      |   |              |
| 7   0.23  | ireland rejects blame for apple's low tax rate                  | False 2013-0 |
| 5-21      |   |              |
| 8   0.07  | apple ceo makes no apology for company's tax strategy           | False 2013-0 |
| 5-21      |   |              |
| 9   0.01  | dow, s&p end at records on fed officials' reassurance           | False 2013-0 |
| 5-21      |   |              |
| 10   0.02 | uk opposition party leader says google tax behavior 'wrong'     | True 2013-05 |
| -21       |   |              |
| 11   0.23 | ireland rejects blame for apple's low tax rate                  | False 2013-0 |
| 5-21      |   |              |
| 12   0.00 | japan exports disappoint, full benefits of weak yen yet to show | False 2013-0 |
| 5-21      |   |              |
| 13   0.07 | apple ceo makes no apology for company's tax strategy           | False 2013-0 |
| 5-22      |   |              |

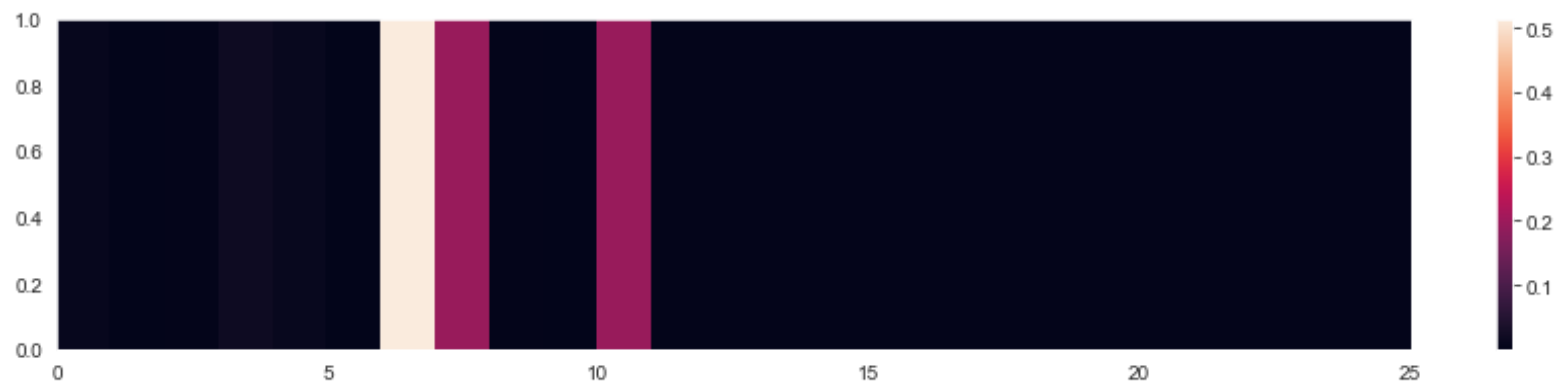


```
== Sample Idx = 1656, n_lookback = 5
```

```
== attn last: 25
```

```
[0.009 0.002 0.002 0.016 0.01 0. 0.54 0.158 0.004 0.002 0.158 0.007
 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
 0.007]
```

```
1 | 0.01 | china factory activity shrinks for first time in seven months: flash pmi | False 2013-05-23
2 | 0.00 | factory activity slips to seven-month low in may: markit | False 2013-05-23
3 | 0.00 | u.s., china factories struggle; fed hints at less stimulus | False 2013-05-23
4 | 0.02 | jobs, housing data show economy has some muscle | False 2013-05-23
5 | 0.01 | apple enjoyed irish tax holiday from the start | False 2013-05-23
6 | 0.00 | global shares end lower in volatile session, dollar falls | False 2013-05-23
7 | 0.54 | nyse says aep, nextera trades stand after crash at open | False 2013-05-23
8 | 0.16 | google faces new federal antitrust probe: source | True 2013-05-23
9 | 0.00 | wall street sags, but ends off session lows; hp hits 52-week high | False 2013-05-23
10 | 0.00 | analysis: markets face rough summer ride as fed pullback feared | False 2013-05-23
11 | 0.16 | google faces new federal antitrust probe: source | True 2013-05-23
```

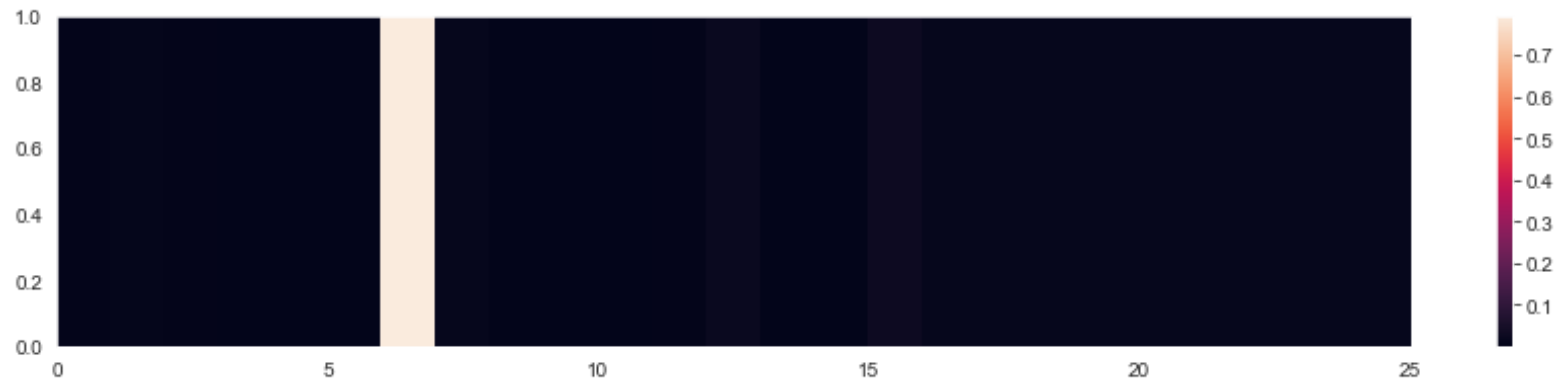


```
== Sample Idx = 1657, n_lookback = 5
```

```
==      attn last:    25
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 0.019 0.001 0.001 0.026 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012  
 0.012]
```

```
 1 | 0.00 |                market turbulence poses first serious test for abenomics | False 2013-0  
5-24  
 2 | 0.01 |                private consumption helps german economy to meager growth | False 2013-0  
5-24  
 3 | 0.00 | german q2 gdp growth to outpace first quarter considerably - ifo economist | False 20  
13-05-24  
 4 | 0.00 |                fed's bullard wants inflation pickup before tapering qe | False 2013-0  
5-24  
 5 | 0.00 | analysis: german economy to pick up but fall short of traditional pace | False 2013-0  
5-24  
 6 | 0.00 |                rosy china growth forecasts fade on further signs of slowdown | False 2013-0  
5-24  
 7 | 0.80 |                google eyes waze as facebook circles hot web maps property | True 2013-05  
-24  
 8 | 0.01 |                stimulus fears haunt share markets, dollar recovers | False 2013-0  
5-24  
 9 | 0.00 |                wall street posts first weekly loss since mid-april on fed angst | False 2013-0  
5-24  
10 | 0.00 | wall street week ahead: investors look for signs in the rally's break | False 2013-0  
5-24  
11 | 0.00 | wall street week ahead: investors look for signs in the rally's break | False 2013-0  
5-24  
12 | 0.00 |                boj's kuroda says pain from bond yield rise is manageable | False 2013-0  
5-26  
13 | 0.02 |                insight: two things missing on spain's route to recovery | False 2013-0  
5-26  
14 | 0.00 |                economic reality finally cracks market fervor | False 2013-0  
5-26  
15 | 0.00 |                economic reality finally cracks market fervor | False 2013-0  
5-26  
16 | 0.03 |                china profit growth quickens, no harbinger of recovery | False 2013-0  
5-26
```



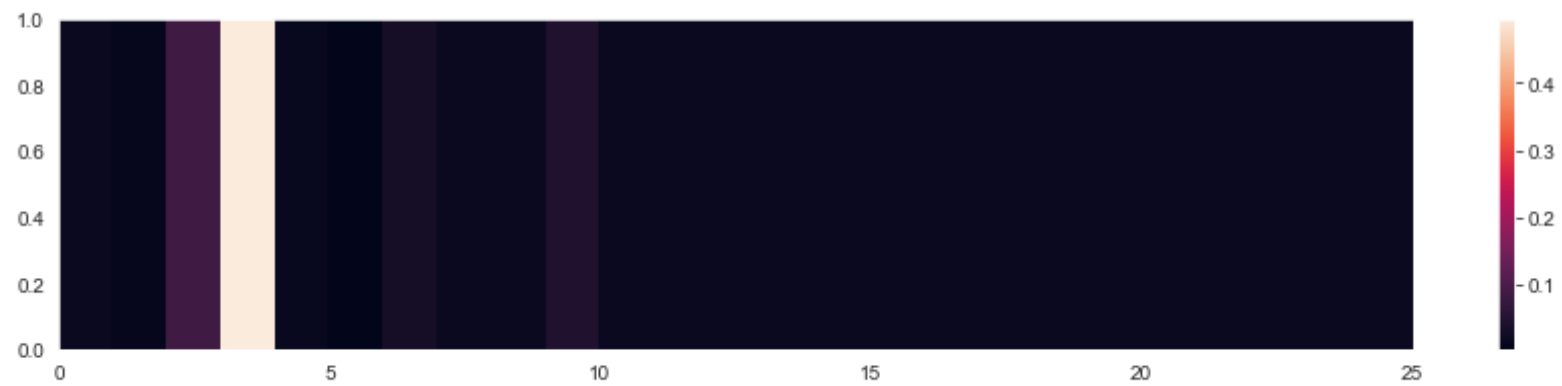
== Sample Idx = 1667, n\_lookback = 5

== attn last: 25

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 0.026 0.026 0.026 0.026 0.026 0.026 0.026 0.026 0.026 0.026 0.026 0.026
 0.026]
```

|    |      |   |                  |
|----|------|---|------------------|
| 1  | 0.01 | china's economy stumbles in may, growth may fall in second quarter    | False 2013-06-10 |
| 2  | 0.01 | u.s., japan leading recovery in major economies: oecd                 | False 2013-06-10 |
| 3  | 0.06 | instant view: s&p revises u.s. credit outlook to 'stable'             | False 2013-06-10 |
| 4  | 0.42 | google finalizing \$1.3 billion deal for mapping company waze: source | True 2013-06-10  |
| 5  | 0.01 | dollar jumps on s&p credit revision, bond yields rise                 | False 2013-06-10 |
| 6  | 0.00 | wall street finishes flat as u.s. gets stable credit outlook          | False 2013-06-10 |
| 7  | 0.02 | obama names furman as new white house chief economist                 | False 2013-06-10 |
| 8  | 0.01 | apple unveils music streaming service, revamps ios                    | False 2013-06-10 |
| 9  | 0.02 | the desktop gets a makeover, courtesy of apple                        | False 2013-06-10 |
| 10 | 0.03 | new apple mobile software will sport anti-theft feature               | False 2013-06-10 |



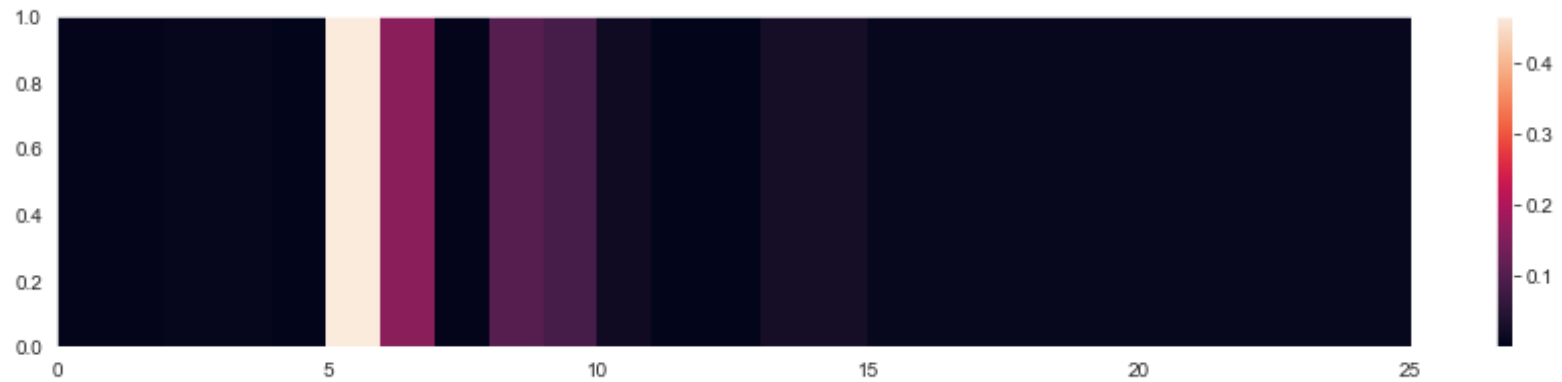


```
== Sample Idx = 1668, n_lookback = 5
```

```
==      attn last:    25
```

```
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 0.001 0.022 0.022 0.01  0.01  0.01  0.01  0.01  0.01  0.01  0.01  0.01  
 0.01 ]
```

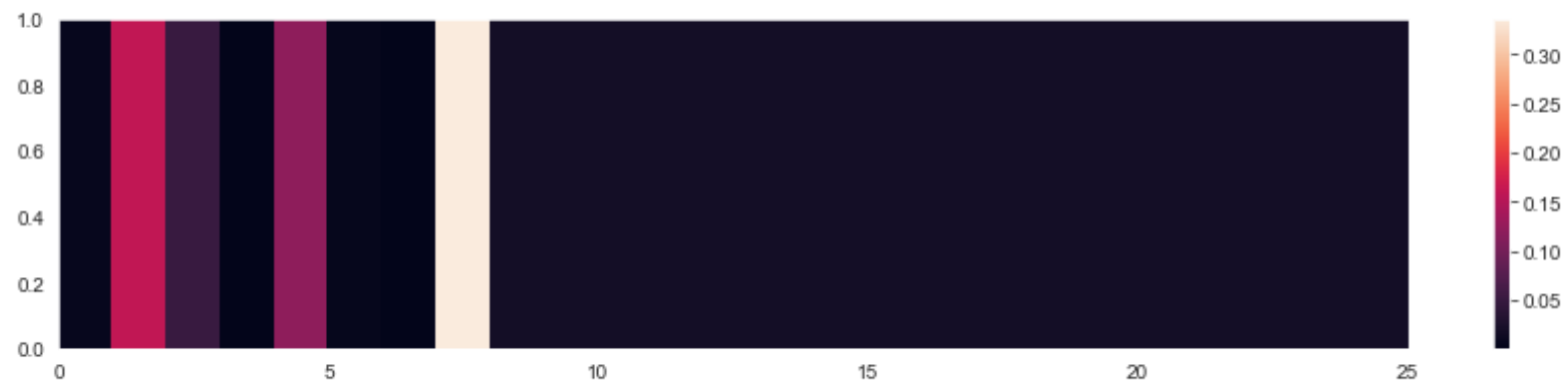
```
 1 | 0.00 |      boj's kuroda: will consider steps to calm jgb market if needed | False 2013-0  
6-11  
 2 | 0.00 |      bank of japan stands pat, leaves door open for market calming steps | False 2013-0  
6-11  
 3 | 0.01 |      apple unveils music streaming service, revamps ios | False 2013-0  
6-11  
 4 | 0.01 |      opec sees room for its over-target oil output | False 2013-0  
6-11  
 5 | 0.00 |      small business confidence hits one-year high in may | False 2013-0  
6-11  
 6 | 0.49 |      boeing executive sees room for higher plane production | False 2013-0  
6-11  
 7 | 0.16 |      boeing raises jetliner demand forecast | False 2013-0  
6-11  
 8 | 0.00 |      wholesale inventories rise mildly, auto stocks surge | False 2013-0  
6-11  
 9 | 0.10 |      google buys israel's waze to keep mobile maps lead | True 2013-06  
-11  
10 | 0.07 |      google asks u.s. permission to publish information request data | True 2013-06  
-11  
11 | 0.02 |      analysis: is u.s. stock trading safer? fewer erroneous trades seen | False 2013-0  
6-11  
12 | 0.00 |      shares hit by stimulus fears; yen soars on boj inaction | False 2013-0  
6-11  
13 | 0.00 |      wall st. slides as boj move rattles trading | False 2013-0  
6-11  
14 | 0.02 |      u.s. tech firms push for government transparency on security | True 2013-06  
-11  
15 | 0.02 |      u.s. tech firms push for government transparency on security | True 2013-06  
-11
```



== Sample Idx = 1669, n\_lookback = 5

== attn last: 25

```
[0.008 0.195 0.049 0.001 0.144 0.006 0.002 0.331 0.016 0.016 0.016 0.016
 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016 0.016
 0.016]
 1 | 0.01 | export slowdown threatens emerging asia's credit-fuelled boom | False 2013-0
6-12
 2 | 0.19 | u.s. ceos slightly more optimistic on economy, hiring: survey | False 2013-0
6-12
 3 | 0.05 | bank of england to give policy guidance once carney takes over: reuters poll | False
2013-06-12
 4 | 0.00 | yellen overwhelming favorite to replace bernanke at fed: reuters poll | False 2013-0
6-12
 5 | 0.14 | u.s. ceos a bit more optimistic on economy, hiring: survey | False 2013-0
6-12
 6 | 0.01 | global shares, dollar retreat on central bank worries | False 2013-0
6-12
 7 | 0.00 | wall st. slides as worry lingers over future of stimulus | False 2013-0
6-12
 8 | 0.33 | uk lawmakers' report criticizes google's tax affairs | True 2013-06
-12
```



== Sample Idx = 1671, n\_lookback = 5

== attn last: 25

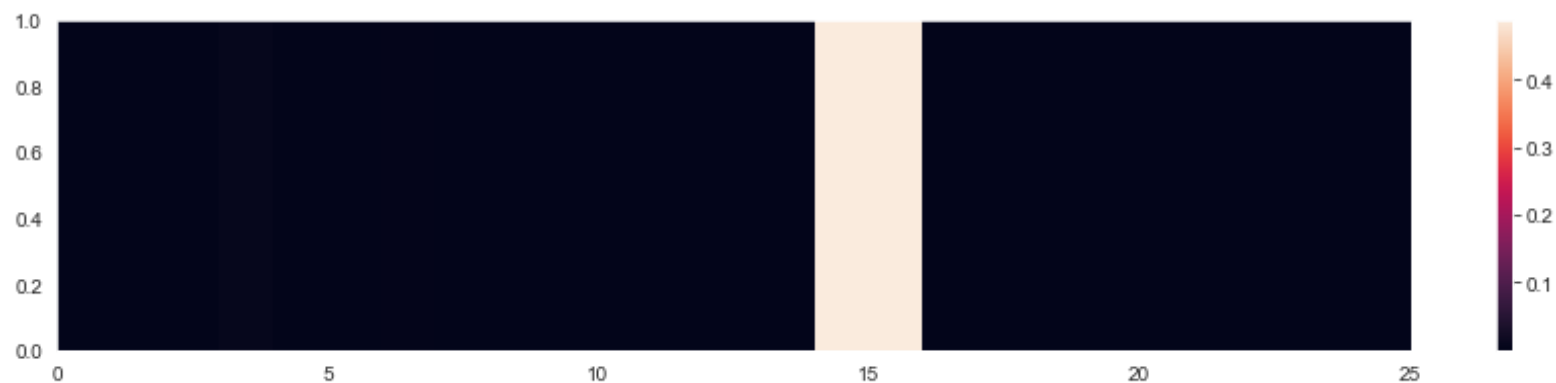
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0. 0.002 0.488 0.488 0.001 0. 0. 0.001 0.001 0.001 0.001 0.001  
0.001]

|      |      |  |              |
|------|------|--|--------------|
| 1    | 0.00 | factbox: main targets and steps in japan's growth strategy         | False 2013-0 |
| 6-14 |      |  |              |
| 2    | 0.00 | market headwinds raise stakes for abe's japan revival plan         | False 2013-0 |
| 6-14 |      |  |              |
| 3    | 0.00 | surge in u.s. oil-by-rail suffers first slowdown as spreads slim   | False 2013-0 |
| 6-14 |      |  |              |
| 4    | 0.01 | current account widens in first quarter                            | False 2013-0 |
| 6-14 |      |  |              |
| 5    | 0.00 | industrial output flat in may                                      | False 2013-0 |
| 6-14 |      |  |              |
| 6    | 0.00 | consumer sentiment slips in june                                   | False 2013-0 |
| 6-14 |      |  |              |
| 7    | 0.00 | foreigners flee from u.s. government bonds in april: treasury      | False 2013-0 |
| 6-14 |      |  |              |
| 8    | 0.00 | g8 to say risks to economy lower, reforms needed: draft            | False 2013-0 |
| 6-14 |      |  |              |
| 9    | 0.00 | euro zone inflation subdued as employment keeps falling            | False 2013-0 |
| 6-14 |      |  |              |
| 10   | 0.00 | consumer and factory data signal steady economy                    | False 2013-0 |
| 6-14 |      |  |              |
| 11   | 0.00 | stocks fall, yen soars on central bank uncertainty                 | False 2013-0 |
| 6-14 |      |  |              |
| 12   | 0.00 | wall st. slides in volatile week, eyes on the fed                  | False 2013-0 |
| 6-14 |      |  |              |
| 13   | 0.00 | wall st. week ahead: investors will look to fed to ease volatility | False 2013-0 |
| 6-14 |      |  |              |
| 14   | 0.00 | boj's reits purchase to exceed previous estimate: paper            | False 2013-0 |
| 6-15 |      |  |              |
| 15   | 0.49 | google's project loon explores balloon-powered internet access     | True 2013-06 |
| -15  |      |  |              |
| 16   | 0.49 | google's project loon explores balloon-powered internet access     | True 2013-06 |
| -15  |      |  |              |
| 17   | 0.00 | analysis: fed-induced selloff has investors hunting for bargains   | False 2013-0 |
| 6-16 |      |  |              |
| 18   | 0.00 | analysis: japan pm abe's true test; rising government bond yields  | False 2013-0 |
| 6-16 |      |  |              |

```

19 | 0.00 | japan's nikkei rises, spurred by defensive buying, | False 2013-0
6-16

```



```

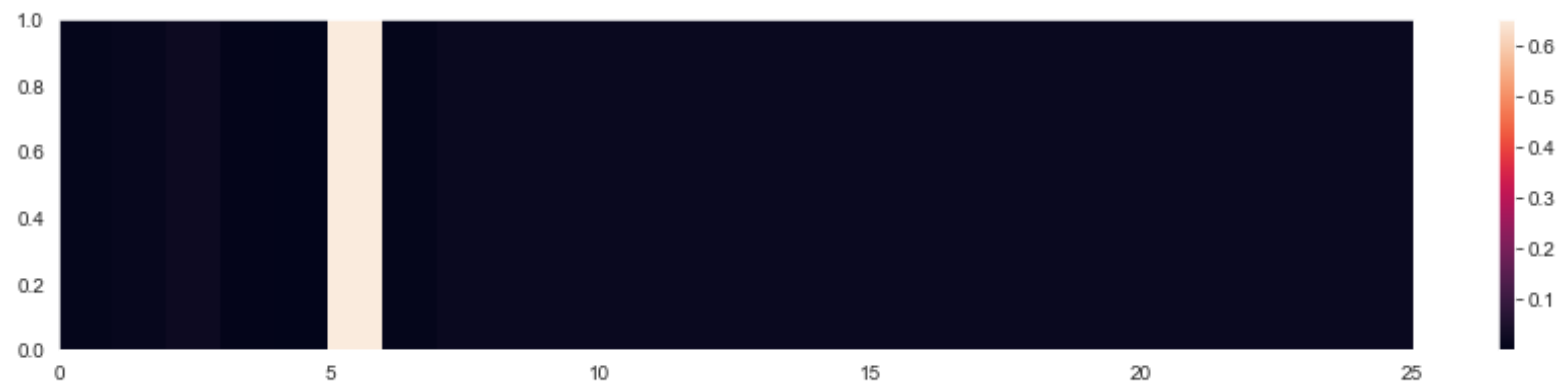
== Sample Idx = 1673, n_lookback = 5

```

```

==      attn last:    25
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 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019 0.019
 0.019]
 1 | 0.01 | japan's nikkei seen rising 51 percent in 2013: reuters poll | False 2013-0
6-18
 2 | 0.01 | rebalance of russell index to bring volume surge at quarter-end | False 2013-0
6-18
 3 | 0.02 | inflation data points to firming economy | False 2013-0
6-18
 4 | 0.01 | wall st. extends rise, investors see no change in fed policy | False 2013-0
6-18
 5 | 0.00 | stocks firm, dollar rises against yen as markets await fed | False 2013-0
6-18
 6 | 0.60 | google challenges surveillance court on first amendment grounds | True 2013-06
-18
 7 | 0.01 | uk's osborne to unveil future of state-controlled banks | False 2013-0
6-18

```



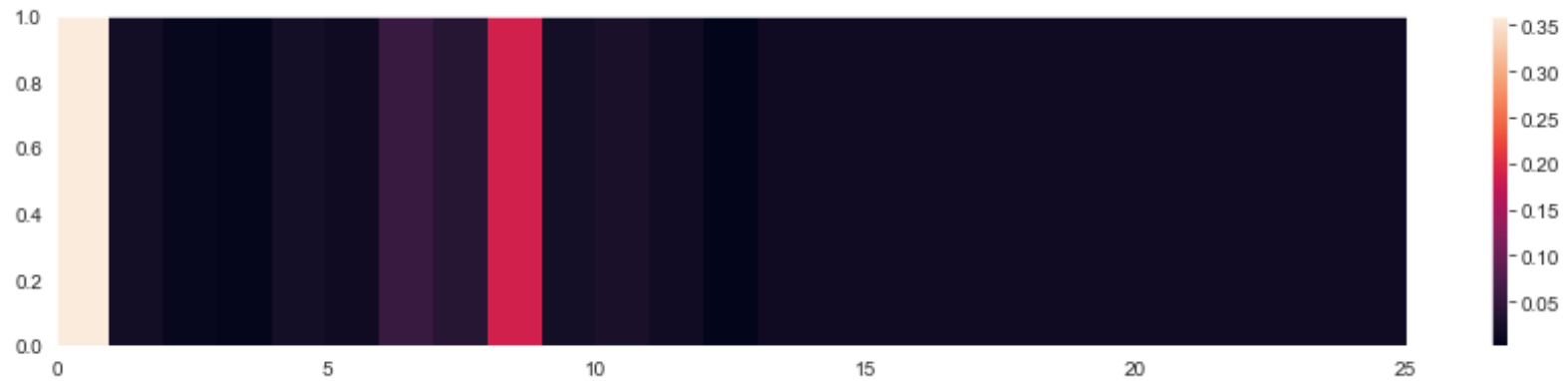
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== Sample Idx = 1675, n_lookback = 5
```

```
==      attn last:    25
```

```
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 0.005 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032 0.032  
 0.032]
```

```
 1 | 0.28 |      italy watchdog presses google for privacy data, weighs sanctions | True 2013-06  
-20  
 2 | 0.01 |      china factory activity hits nine month low, policy action eyed | False 2013-0  
6-20  
 3 | 0.01 |      factories struggle in june, hiring slows: markit | False 2013-0  
6-20  
 4 | 0.01 |      home resales rise to three-and-half year high; prices jump | False 2013-0  
6-20  
 5 | 0.02 |      putin says rosneft close to $60 billion china oil deal | False 2013-0  
6-20  
 6 | 0.01 |      gold hits two-and-half year low as fed flags end to easy money | False 2013-0  
6-20  
 7 | 0.04 |      chinese, u.s. factories struggle, europe still in slump | False 2013-0  
6-20  
 8 | 0.04 |      housing, regional factory data show economy's stamina | False 2013-0  
6-20  
 9 | 0.14 |      france, spain take action against google on privacy | True 2013-06  
-20  
10 | 0.02 |      stocks, bonds, commodities slump on fed comments | False 2013-0  
6-20  
11 | 0.02 |      investors hit hard as apple bonds tank | False 2013-0  
6-20  
12 | 0.02 |      analysis: anxiety grows as stock market learns to walk on its own | False 2013-0  
6-20  
13 | 0.01 |      wall st. plunges, s&p posts biggest drop since nov 2011 | False 2013-0  
6-20
```



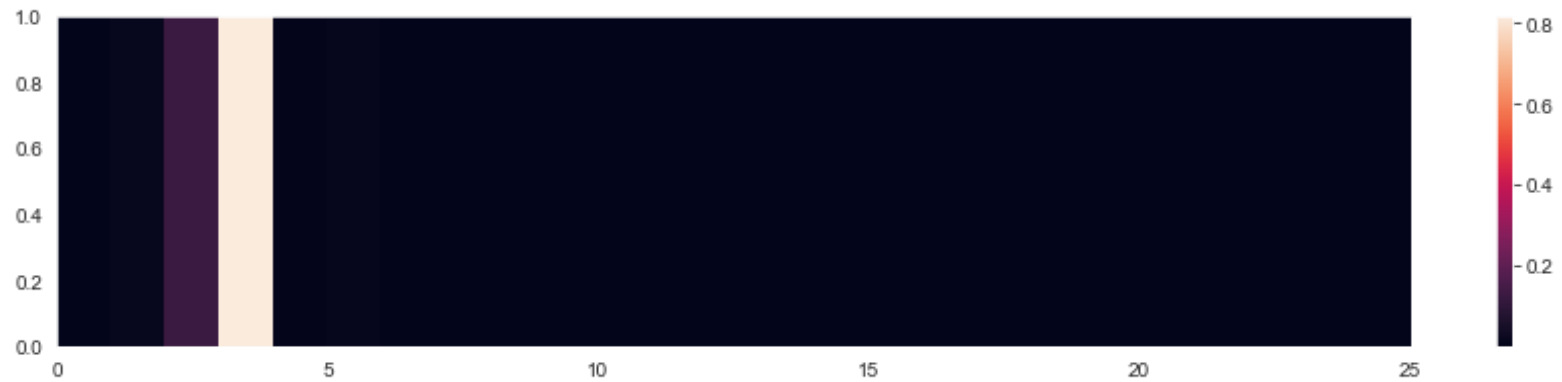


```
== Sample Idx = 1677, n_lookback = 5
```

```
==      attn last:      25
```

```
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0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003 0.003
0.003]
```

|    |      |   |       |            |
|----|------|---|-------|------------|
| 1  | 0.00 | when the ben and beijing party comes to an end                        | False | 2013-06-24 |
| 2  | 0.01 | china cash squeeze eases, but bank shares take big hit                | False | 2013-06-24 |
| 3  | 0.12 | ftc opens oil pricing probe, following eu: bloomberg                  | False | 2013-06-24 |
| 4  | 0.80 | ftc conducting preliminary inquiry of google's waze acquisition       | True  | 2013-06-24 |
| 5  | 0.00 | exclusive: brics nations monitoring 'complex' global markets - source | False | 2013-06-24 |
| 6  | 0.01 | treasuries, shares resuscitate; fed still weighs                      | False | 2013-06-24 |
| 7  | 0.00 | wall street ends down but off lows as bond prices gain                | False | 2013-06-24 |
| 8  | 0.00 | cash hard to raise as fed jars credit markets                         | False | 2013-06-24 |
| 9  | 0.00 | cash hard to raise as fed jars credit markets                         | False | 2013-06-24 |
| 10 | 0.00 | brics seek to limit fallout of u.s. stimulus withdrawal               | False | 2013-06-24 |

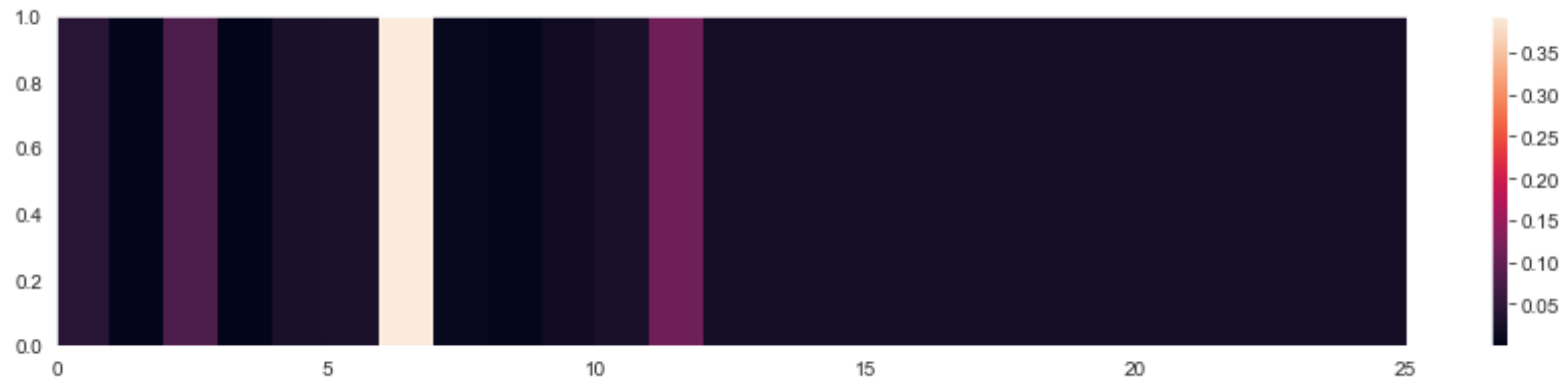


== Sample Idx = 1682, n\_lookback = 5

== attn last: 25

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0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035 0.035
0.035]
```

|    |      |   |                  |
|----|------|---|------------------|
| 1  | 0.03 | china june official pmi slips to 50.1, adds to growth worries       | False 2013-07-01 |
| 2  | 0.00 | japan business mood turns positive, boj may upgrade econ view       | False 2013-07-01 |
| 3  | 0.08 | apple applies to register 'iwatch' trademark in japan               | False 2013-07-01 |
| 4  | 0.00 | euro zone joblessness at record high, inflation up                  | False 2013-07-01 |
| 5  | 0.02 | manufacturing grows in june, but hiring down: ism                   | False 2013-07-01 |
| 6  | 0.02 | u.s. factories rebound, china struggles, europe shows promise       | False 2013-07-01 |
| 7  | 0.25 | authors lose class status in google digital books case              | True 2013-07-01  |
| 8  | 0.01 | factories rebound in june, but hiring down                          | False 2013-07-01 |
| 9  | 0.01 | analysis: after selloff, some dip toes back in emerging markets     | False 2013-07-01 |
| 10 | 0.01 | global shares, oil gain on u.s., european manufacturing data        | False 2013-07-01 |
| 11 | 0.03 | s&p 500 extends gains to year's second half on solid data           | False 2013-07-01 |
| 12 | 0.07 | apple plans nevada solar farm in clean energy push for data centers | False 2013-07-01 |

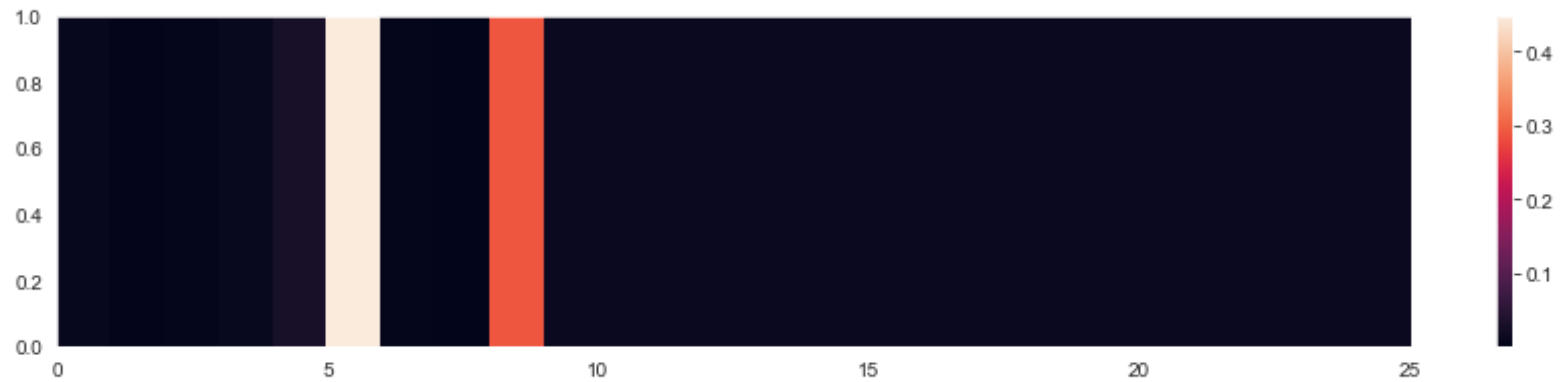


== Sample Idx = 1687, n\_lookback = 5

== attn last: 25

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 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024
 0.024]
```

|   |  |      |  |   |  |                  |
|---|--|------|--|---|--|------------------|
| 1 |  | 0.01 |  | china inflation picks up, limits room for policy easing                     |  | False 2013-07-09 |
| 2 |  | 0.00 |  | bangladesh garment sales soar despite deadly incidents                      |  | False 2013-07-09 |
| 3 |  | 0.00 |  | india looks to u.s. in struggle to boost fdi and revive rupee               |  | False 2013-07-09 |
| 4 |  | 0.01 |  | greek outlook bleaker than lenders think, local think tank calculates       |  | False 2013-07-09 |
| 5 |  | 0.02 |  | u.s. employers pick up pace of hiring in may: labor department jolts survey |  | False 2013-07-09 |
| 6 |  | 0.38 |  | apple, amazon end 'app store' lawsuit                                       |  | False 2013-07-09 |
| 7 |  | 0.00 |  | global shares rally on earnings hopes; u.s. dollar gains                    |  | False 2013-07-09 |
| 8 |  | 0.00 |  | wall street rises for fourth day on earnings hope, fedex jumps              |  | False 2013-07-09 |
| 9 |  | 0.19 |  | microsoft reports hackings linked to report by google researcher            |  | True 2013-07-09  |

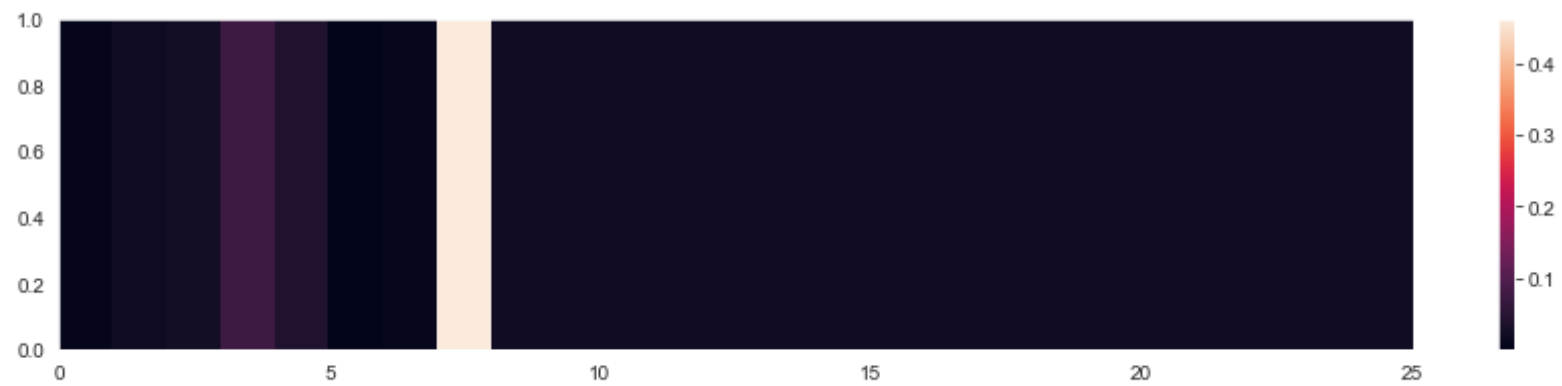


== Sample Idx = 1689, n\_lookback = 5

== attn last: 25

```
[0.006 0.015 0.018 0.066 0.035 0.001 0.007 0.371 0.028 0.028 0.028 0.028
 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028
 0.028]
```

|          |   |                  |
|----------|---|------------------|
| 1   0.01 | boj says economy recovering, unfazed by china slowdown        | False 2013-07-11 |
| 2   0.02 | japan may press china on slowdown, shadow banking at g20      | False 2013-07-11 |
| 3   0.02 | analysis: fed stops short of the clarity global markets crave | False 2013-07-11 |
| 4   0.07 | jobless claims rise, but labor recovery grinds on             | False 2013-07-11 |
| 5   0.04 | analysis: investors pin hopes on second-half earnings rebound | False 2013-07-11 |
| 6   0.00 | s&p hits closing high, dollar falls as fed calms              | False 2013-07-11 |
| 7   0.01 | bernanke's reassurance propels shares to record highs         | False 2013-07-11 |
| 8   0.37 | google's schmidt says relationship with apple has improved    | True 2013-07-11  |

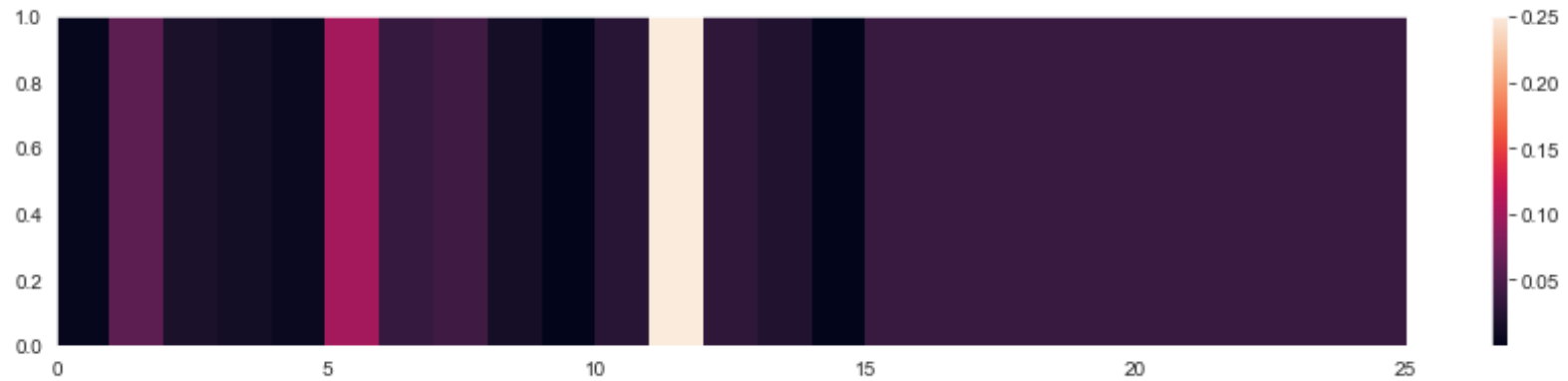


```
== Sample Idx = 1690, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.003 0.028 0.009 0.009 0.01  0.057 0.025 0.026 0.011 0.    0.014 0.212  
 0.02  0.016 0.    0.056 0.056 0.056 0.056 0.056 0.056 0.056 0.056  
 0.056]
```

```
 1 | 0.00 |                consumer sentiment slips slightly in early july | False 2013-0  
7-12  
 2 | 0.03 |                china agrees to currency, procurement reforms in talks with u.s | False 2013-0  
7-12  
 3 | 0.01 |                stock price drop takes glow off u.s. consumer sentiment | False 2013-0  
7-12  
 4 | 0.01 |                global stocks post best week since november | False 2013-0  
7-12  
 5 | 0.01 |                wall st. rises on banks' results; s&p's best week since january | False 2013-0  
7-12  
 6 | 0.06 |                microsoft pushes u.s. customs to enforce phone import ban | True 2013-07  
-12  
 7 | 0.03 |                as earnings take over, fundamentals to be tested | False 2013-0  
7-13  
 8 | 0.03 |                xinhua corrects china finance minister's growth target comment | False 2013-0  
7-13  
 9 | 0.01 |                china to adjust liquidity, keep credit growth steady: central bank | False 2013-0  
7-14  
10 | 0.00 |                spain out of recession, must nurture recovery: minister | False 2013-0  
7-14  
11 | 0.01 |                fear of fed and china slowdown take a toll | False 2013-0  
7-14  
12 | 0.21 |                rajoy's risky bet on spanish economic recovery | False 2013-0  
7-14  
13 | 0.02 |                analysis: as china's economic pain increases, so does reform effort | False 2013-0  
7-14  
14 | 0.02 |                china economic slowdown seen deepening as beijing pushes reform | False 2013-0  
7-14  
15 | 0.00 |                analysis: even as election spells japan pm win, big reform may lose out | False 2013-  
07-14
```

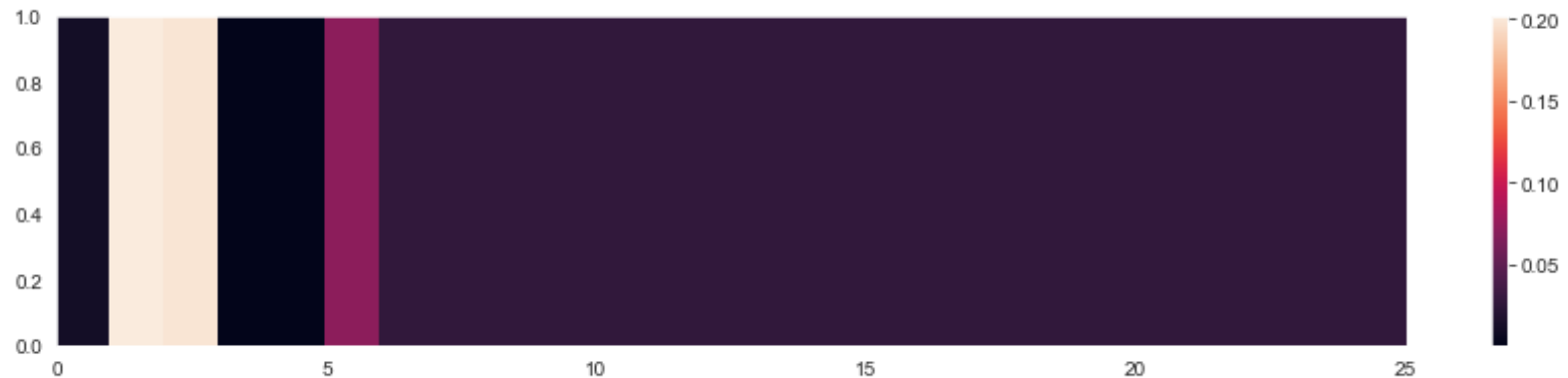


== Sample Idx = 1694, n\_lookback = 5

== attn last: 25

```
[0.011 0.293 0.222 0.001 0.001 0.079 0.021 0.021 0.021 0.021 0.021 0.021
 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021 0.021
 0.021]
```

|   |      |  |   |                  |
|---|------|--|---|------------------|
| 1 | 0.01 |  | asian economies struggling to reignite growth while exports sag           | False 2013-07-18 |
| 2 | 0.29 |  | china urges local governments to speed up spending to support the economy | False 2013-07-18 |
| 3 | 0.22 |  | factory, labor market data offer bright signs for economy                 | False 2013-07-18 |
| 4 | 0.00 |  | stocks hit record highs on bernanke, yen drops                            | False 2013-07-18 |
| 5 | 0.00 |  | dow, s&p 500 end at all-time highs on earnings, bernanke                  | False 2013-07-18 |
| 6 | 0.08 |  | falling ad rates, motorola losses dent google results                     | True 2013-07-18  |



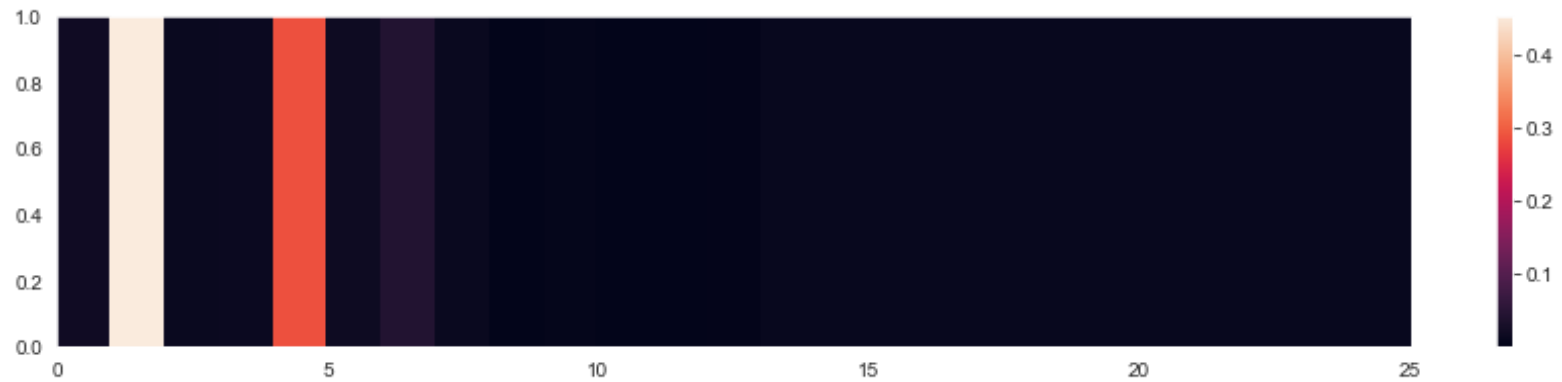
```
== Sample Idx = 1695, n_lookback = 5
```

```
== attn last: 25
```

```
[0.022 0.332 0.011 0.014 0.252 0.017 0.035 0.018 0.002 0.005 0.002 0.001  
0.003 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024 0.024  
0.024]
```

|    |  |      |  |  |  |       |            |
|----|--|------|--|--|--|-------|------------|
| 1  |  | 0.02 |  | analysis: morgan stanley stock traders rebuild burned bridges        |  | False | 2013-07-19 |
| 2  |  | 0.33 |  | google shares set to open lower on margin decline, target price cuts |  | True  | 2013-07-19 |
| 3  |  | 0.01 |  | instant view: china liberalizes bank lending rates                   |  | False | 2013-07-19 |
| 4  |  | 0.01 |  | morgan stanley stock traders rebuild burned bridges                  |  | False | 2013-07-19 |
| 5  |  | 0.25 |  | schlumberger soars on global drilling boom, baker hit at home        |  | False | 2013-07-19 |
| 6  |  | 0.02 |  | dollar slips, shares waver after equity rally                        |  | False | 2013-07-19 |
| 7  |  | 0.04 |  | china frees up lending rates in major reform                         |  | False | 2013-07-19 |
| 8  |  | 0.02 |  | nasdaq, dow slip on tech weakness, s&p 500 edges up                  |  | False | 2013-07-19 |
| 9  |  | 0.00 |  | wall st. week ahead: as fed takes a backseat, earnings rule market   |  | False | 2013-07-19 |
| 10 |  | 0.00 |  | south sudan to shut down oil production by end of july               |  | False | 2013-07-20 |
| 11 |  | 0.00 |  | analysis: erdogan puts turkish policymakers in dilemma               |  | False | 2013-07-21 |
| 12 |  | 0.00 |  | europe still sleeping even as japan, britain stir                    |  | False | 2013-07-21 |
| 13 |  | 0.00 |  | china's rate reform points to eventual banking shake-up              |  | False | 2013-07-21 |

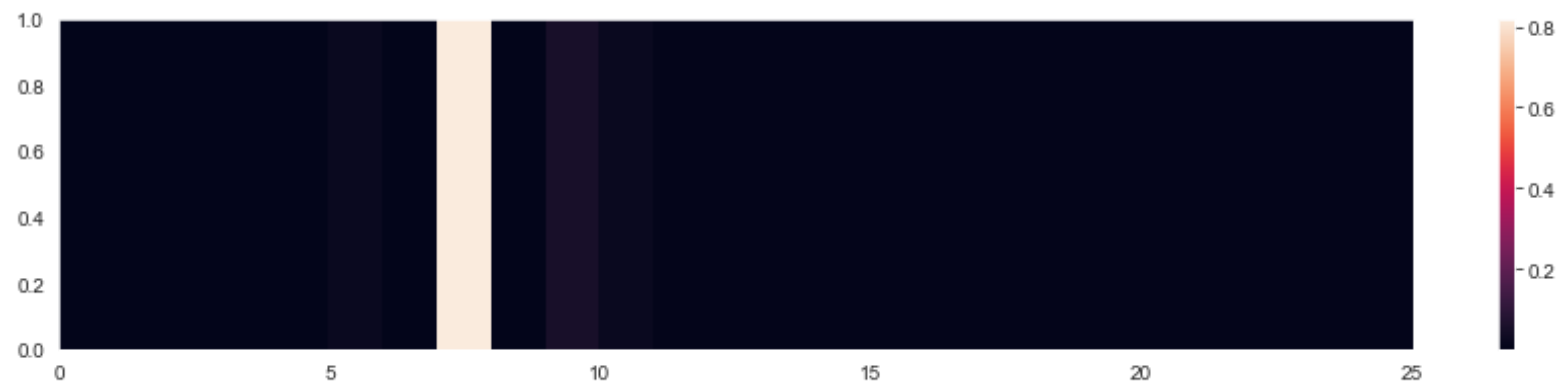




== Sample Idx = 1713, n\_lookback = 5

== attn last: 25

```
[0.    0.001 0.002 0.002 0.001 0.019 0.001 0.793 0.001 0.052 0.024 0.007
 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007 0.007
 0.007]
 1 | 0.00 |          france exits recession, beats second quarter gdp forecasts | False 2013-0
8-14
 2 | 0.00 |          euro zone performance suggests recovery in sight: eu's rehn | False 2013-0
8-14
 3 | 0.00 |          germany, france haul euro zone out of recession | False 2013-0
8-14
 4 | 0.00 | yellen seen as likely next fed chair despite summers chatter: reuters poll | False 20
13-08-14
 5 | 0.00 | u.s. in modest recovery; fed to cut back on qe next month: reuters poll | False 2013-
08-14
 6 | 0.02 |          j.c. penney shares spike on report sales improving in august | False 2013-0
8-14
 7 | 0.00 |          wall street ends down on fed uncertainty; data boosts europe | False 2013-0
8-14
 8 | 0.79 |      analysis: with balloons and fiber, google experiments in web access | True 2013-08
-14
 9 | 0.00 |          wall street falls on uncertainty about fed's bond buying | False 2013-0
8-14
10 | 0.05 |          apple faces possible may 2014 trial on e-book damages | False 2013-0
8-14
11 | 0.02 | japan government spokesman: no truth pm abe instructed corporate tax cut | False 2013
-08-14
```

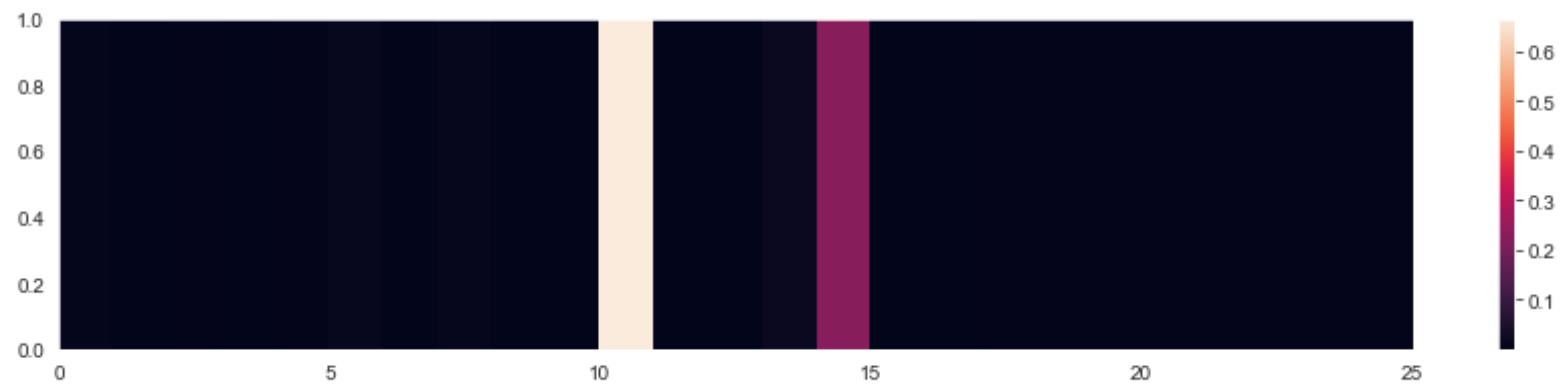


```
== Sample Idx = 1720, n_lookback = 5
```

```
==      attn last: 25
```

```
[0.007 0.002 0.004 0.      0.004 0.015 0.002 0.011 0.001 0.002 0.646 0.001  
 0.001 0.019 0.246 0.001 0.001 0.005 0.005 0.005 0.005 0.005 0.005 0.005  
 0.005]
```

```
 1 | 0.01 | analysis: as mississippi oil barge arbitrage window shuts, another opens | False 2013-08-23  
 2 | 0.00 |          analysis: low inflation mystery could be a hitch in fed's plans | False 2013-08-23  
 3 | 0.00 |          insight: brazil's tombini - an inflation hawk, believe it or not | False 2013-08-23  
 4 | 0.00 |          germany, britain lead europe's nascent economic recovery | False 2013-08-23  
 5 | 0.00 |          u.s. new home sales fall sharply; house prices rise | False 2013-08-23  
 6 | 0.01 |          apple battles u.s. over scope of e-books injunction | False 2013-08-23  
 7 | 0.00 |          argentina markets give back gains after u.s. court stay | False 2013-08-23  
 8 | 0.01 |          global stocks gain; doubts arise on end to fed purchases | False 2013-08-23  
 9 | 0.00 |          wall street ends up a day after nasdaq outage, microsoft jumps | False 2013-08-23  
10 | 0.00 |          exclusive: ebs take new step to rein in high-frequency traders | False 2013-08-23  
11 | 0.65 |          apple, samsung do not have to disclose profit details: court | False 2013-08-23  
12 | 0.00 | wall street week ahead: economic data to steer bets on fed's next move | False 2013-08-23  
13 | 0.00 |          wall street ends up a day after nasdaq outage, microsoft jumps | False 2013-08-23  
14 | 0.02 |          emerging countries must be able to control capital flows: study | False 2013-08-24  
15 | 0.25 |          microsoft, motorola set for second round of trial over patents | True 2013-08-25  
16 | 0.00 |          global economy: on a firmer footing awaiting the fed | False 2013-08-25  
17 | 0.00 |          japan prices to keep rising in july, output rebound eyed | False 2013-08-25
```



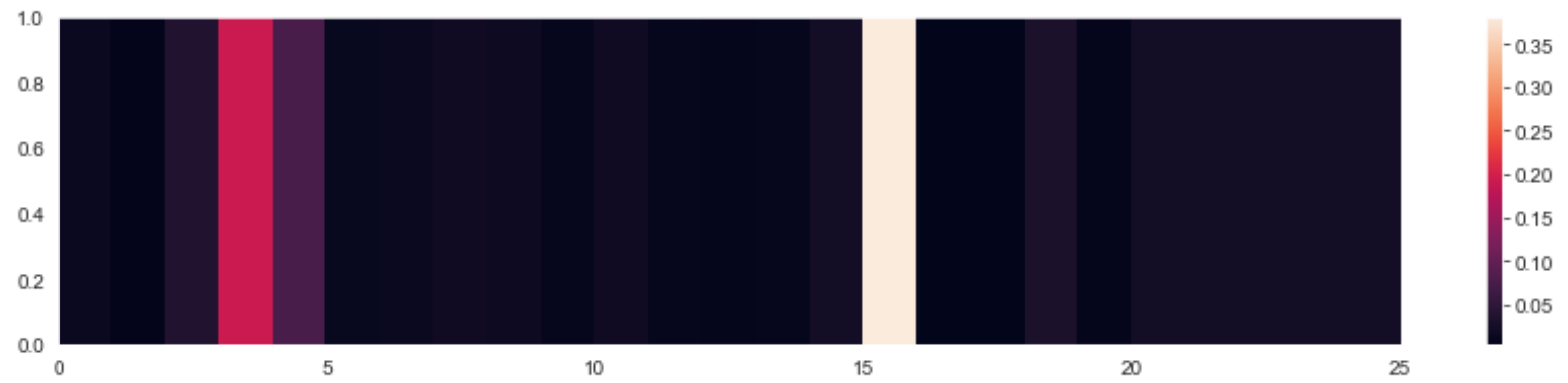
```
== Sample Idx = 1724, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.013 0.007 0.033 0.202 0.079 0.01  0.019 0.021 0.017 0.008 0.015 0.011  
0.007 0.008 0.021 0.371 0.003 0.005 0.03  0.009 0.023 0.023 0.023 0.023  
0.023]
```

|    |  |      |  |   |  |                  |
|----|--|------|--|---|--|------------------|
| 1  |  | 0.01 |  | india pm likely to make statement on economy on friday                    |  | False 2013-08-29 |
| 2  |  | 0.01 |  | boj policymaker warns emerging markets may see more outflows              |  | False 2013-08-29 |
| 3  |  | 0.03 |  | eu's rehn says lenders to step up assessment of greece next month         |  | False 2013-08-29 |
| 4  |  | 0.20 |  | china environment min suspends some approvals for sinopec, cnpc           |  | False 2013-08-29 |
| 5  |  | 0.08 |  | italy must still meet targets after scrapping property tax, says rehn     |  | False 2013-08-29 |
| 6  |  | 0.01 |  | spain's economic slump longer than thought, but easing                    |  | False 2013-08-29 |
| 7  |  | 0.02 |  | india's central bank should consider monetizing gold: trade minister      |  | False 2013-08-29 |
| 8  |  | 0.02 |  | rupee falls in front of slowing indian economy                            |  | False 2013-08-29 |
| 9  |  | 0.02 |  | india rupee bounces from record low, pm may address parliament on economy |  | False 2013-08-29 |
| 10 |  | 0.01 |  | exclusive: india might buy gold from citizens to ease rupee crisis        |  | False 2013-08-29 |
| 11 |  | 0.02 |  | spain's recession longer than thought, but close to ending                |  | False 2013-08-29 |
| 12 |  | 0.01 |  | india finance minister asks banks to ensure credit flow to industry       |  | False 2013-08-29 |
| 13 |  | 0.01 |  | easing stimulus, oversupply to weigh on oil next year: reuters poll       |  | False 2013-08-29 |
| 14 |  | 0.01 |  | exclusive: india might buy gold from citizens to ease rupee crisis        |  | False 2013-08-29 |
| 15 |  | 0.02 |  | india rupee bounces from record low; government seeks solutions           |  | False 2013-08-29 |
| 16 |  | 0.37 |  | china's xiaomi poaches google's barra to power global drive               |  | True 2013-08-29  |
| 17 |  | 0.00 |  | gdp growth beats forecasts; may boost case for fed move                   |  | False 2013-08-29 |
| 18 |  | 0.00 |  | wall street rises on economy, but syria concerns limit gains              |  | False 2013-08-29 |

19 | 0.03 | oil dips as syria action uncertain; dollar rises on data | False 2013-0  
8-29  
20 | 0.01 | boe's carney says uncertainty about rbs' future must end | False 2013-0  
8-29

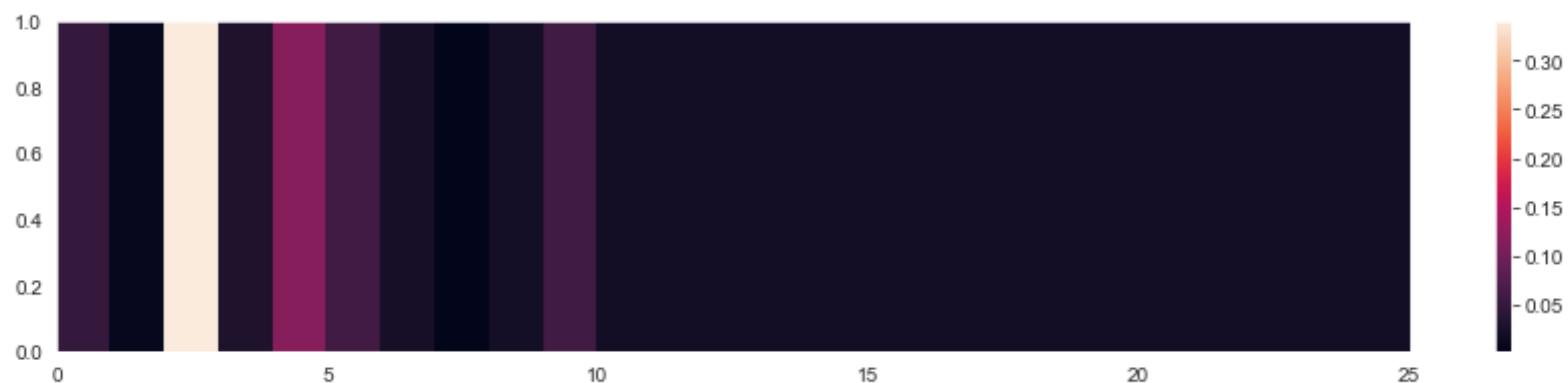


```
== Sample Idx = 1730, n lookback = 5
```

```
==      attn last:      25
```

```
[0.032 0.005 0.247 0.021 0.106 0.041 0.024 0.004 0.016 0.052 0.03 0.03
0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03 0.03
0.03 ]
```

|    |      |  |       |            |
|----|------|--|-------|------------|
| 1  | 0.03 | japan q2 gdp revised up sharply, boosts case for tax hike                | False | 2013-09-09 |
| 2  | 0.01 | bank of france raises growth forecast slightly                           | False | 2013-09-09 |
| 3  | 0.25 | google offers new concessions to avoid fine in eu antitrust case         | True  | 2013-09-09 |
| 4  | 0.02 | china aug inflation another sign economy is stabilizing                  | False | 2013-09-09 |
| 5  | 0.11 | exclusive: malaysia's petronas exiting venezuela crude project - sources | False | 2013-09-09 |
| 6  | 0.04 | stocks rally on china data; bonds up on syria fears                      | False | 2013-09-09 |
| 7  | 0.02 | insight: why indian exports need more than a cheap rupee                 | False | 2013-09-09 |
| 8  | 0.00 | wall street jumps, nasdaq ends at highest since september 2000           | False | 2013-09-09 |
| 9  | 0.02 | investors bullish ahead of apple iphone launch                           | False | 2013-09-09 |
| 10 | 0.05 | petronas confirms withdrawal from venezuela project                      | False | 2013-09-09 |



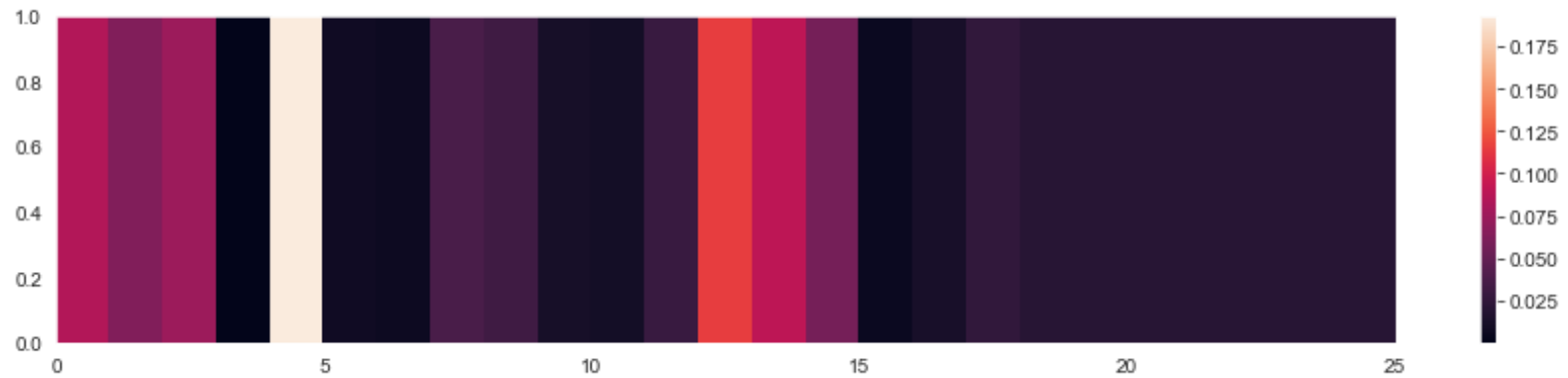
```
== Sample Idx = 1731, n_lookback = 5
```

```
== attn last: 25
```

```
[0.086 0.07 0.075 0. 0.172 0.01 0.007 0.039 0.032 0.01 0.012 0.029  
0.114 0.106 0.071 0.006 0.011 0.021 0.018 0.018 0.018 0.018 0.018 0.018  
0.018]
```

|      |  |      |  |   |  |              |
|------|--|------|--|---|--|--------------|
| 1    |  | 0.09 |  | growth in china property investment and sales slows in august         |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 2    |  | 0.07 |  | china august new bank loans above forecast, social financing jumps    |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 3    |  | 0.08 |  | malaysia's petronas exiting venezuela crude project                   |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 4    |  | 0.00 |  | japan pm abe moves toward tax hike, orders economic stimulus          |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 5    |  | 0.17 |  | china output data reinforces view economy has steadied                |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 6    |  | 0.01 |  | india's august trade deficit shrinks as exports rise                  |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 7    |  | 0.01 |  | asian central banks brace for fed's move, indonesia seen most at risk |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 8    |  | 0.04 |  | u.s. small business confidence slips in august                        |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 9    |  | 0.03 |  | u.s. job openings fall almost broadly in july                         |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 10   |  | 0.01 |  | analysis: brazil may be spending its way towards a downgrade          |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 11   |  | 0.01 |  | dow jones index announces biggest shake-up in a decade                |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 12   |  | 0.03 |  | china data spurs stocks; syria diplomacy pressures debt, oil          |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 13   |  | 0.11 |  | google loses appeal in street view privacy case                       |  | True 2013-09 |
| -10  |  |      |  |   |  |              |
| 14   |  | 0.11 |  | early china iphone launch gives smugglers a run for their money       |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 15   |  | 0.07 |  | apple's two new iphones target high, low-end markets                  |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 16   |  | 0.01 |  | s&p 500 gains for sixth straight session, apple falls                 |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 17   |  | 0.01 |  | insight: changing china set to shake world economy, again             |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |
| 18   |  | 0.02 |  | analysis: german business confident as china shifts gears             |  | False 2013-0 |
| 9-10 |  |      |  |   |  |              |



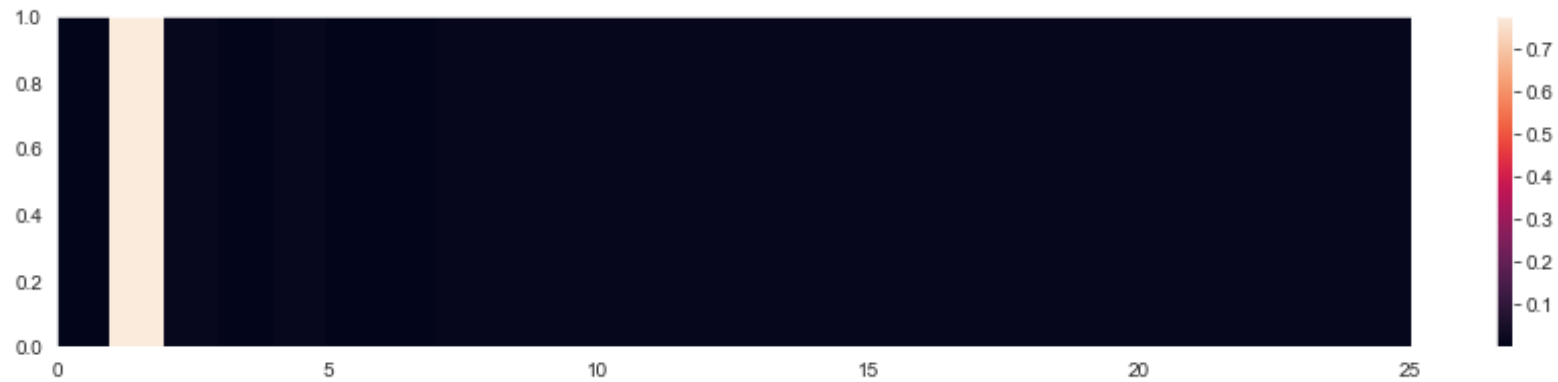


```
== Sample Idx = 1745, n_lookback = 5
```

```
== attn last: 25
```

```
[0.002 0.78 0.012 0. 0.015 0.001 0. 0.011 0.011 0.011 0.011 0.011
0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011
0.011]
```

```
1 | 0.00 | japan august output slips - seen rising on exports, domestic demand | False 2013-0
9-30
2 | 0.78 | google pays $55 million tax in britain on 2012 sales of $5 billion | True 2013-09
-30
3 | 0.01 | dollar, global shares fall as u.s. government shutdown looms | False 2013-0
9-30
4 | 0.00 | in historic step, japan pm to hike tax; will cushion blow to economy | False 2013-0
9-30
5 | 0.01 | wall street declines as government shutdown nears | False 2013-0
9-30
6 | 0.00 | instant view: japan third quarter big manufacturers' mood improves - boj tankan | Fal
se 2013-09-30
7 | 0.00 | in historic step, japan pm to hike tax; will cushion blow to economy | False 2013-0
9-30
```

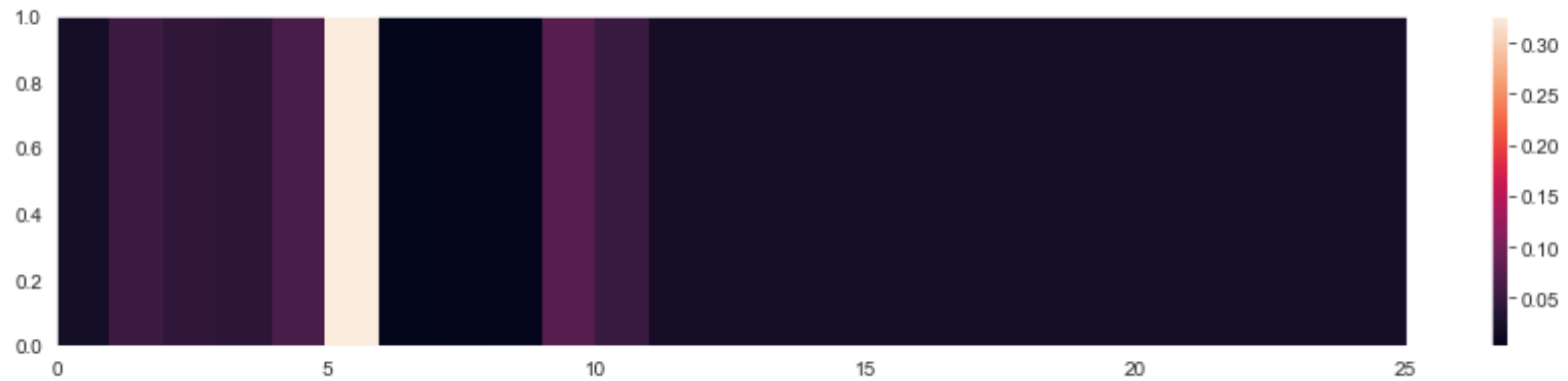


== Sample Idx = 1748, n\_lookback = 5

== attn last: 25

```
[0.019 0.048 0.035 0.035 0.061 0.352 0.003 0.006 0.006 0.069 0.047 0.023
 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023 0.023
 0.023]
```

|            |      |   |                  |
|------------|------|---|------------------|
| 1          | 0.02 | exclusive: slowing indian economy may force chidambaram to wield budget knife | False            |
| 2013-10-03 |      |   |                  |
| 2          | 0.05 | u.s. planned layoffs fall 20 pct in september: challenger                     | False 2013-10-03 |
| 3          | 0.03 | service sector growth slows in september: ism                                 | False 2013-10-03 |
| 4          | 0.03 | u.s. jobs report delayed by shutdown, no new date set                         | False 2013-10-03 |
| 5          | 0.06 | u.s. jobless claims show job market healing but service sector slows          | False 2013-10-03 |
| 6          | 0.35 | appeals court revives microsoft claim against google                          | True 2013-10-03  |
| 7          | 0.00 | wall street ends lower as shutdown continues for third day                    | False 2013-10-03 |
| 8          | 0.01 | boj to stand pat, stick to upbeat economy view despite tax rise               | False 2013-10-03 |
| 9          | 0.01 | dollar languishes at eight-month low, u.s. debt ceiling a worry               | False 2013-10-03 |
| 10         | 0.07 | analysis: u.s. default seems unthinkable but investors have options           | False 2013-10-03 |
| 11         | 0.05 | stockton city council backs plan to exit bankruptcy                           | False 2013-10-03 |

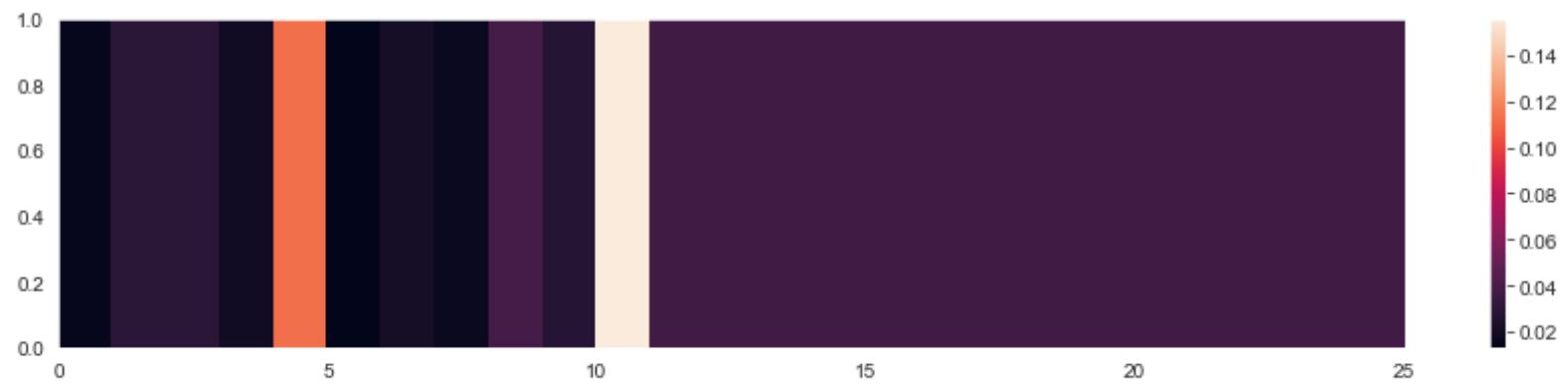


== Sample Idx = 1758, n\_lookback = 5

== attn last: 25

```
[0.006 0.016 0.018 0.01  0.051 0.006 0.011 0.007 0.022 0.013 0.104 0.053
 0.053 0.053 0.053 0.053 0.053 0.053 0.053 0.053 0.053 0.053 0.053 0.053
 0.053]
```

|    |      |  |   |                  |
|----|------|--|---|------------------|
| 1  | 0.01 |  | japan economy on track as stimulus spending eyed: poll              | False 2013-10-17 |
| 2  | 0.02 |  | boj to extend loan schemes to encourage bank lending: sources       | False 2013-10-17 |
| 3  | 0.02 |  | analysis: washington becomes the biggest risk to the u.s. economy   | False 2013-10-17 |
| 4  | 0.01 |  | china warns of slowing demand from emerging markets                 | False 2013-10-17 |
| 5  | 0.05 |  | u.s. commercial paper market shrinks in week: fed                   | False 2013-10-17 |
| 6  | 0.01 |  | fiscal policy fight may dampen u.s. economic growth: reuters poll   | False 2013-10-17 |
| 7  | 0.01 |  | s&p 500 sets record high on relief over u.s. fiscal deal            | False 2013-10-17 |
| 8  | 0.01 |  | flood of u.s. economic data set to wash up on wall street           | False 2013-10-17 |
| 9  | 0.02 |  | sweet and sour earnings back on the menu for u.s. investors         | False 2013-10-17 |
| 10 | 0.01 |  | dollar near eight-month low, investors count costs of u.s. shutdown | False 2013-10-17 |
| 11 | 0.10 |  | google's q3 beats as ad volume grows, stock flirts \$1,000 level    | True 2013-10-17  |



```
== Sample Idx = 1759, n_lookback = 5
```

```
==      attn last:    25
```

```
[0.007 0.054 0.012 0.021 0.161 0.021 0.012 0.01  0.076 0.001 0.091 0.301
```

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0.005 0.003 0.007 0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.022
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0.022]
```

```
1 | 0.01 |      china economy showed signs of slowing in september: stats bureau | False 2013-1  
0-18
```

```
2 | 0.05 |      china shares up on comforting data, but still have weekly loss | False 2013-1  
0-18
```

```
3 | 0.01 |      china's third-quarter gdp growth fastest this year, but outlook dim | False 2013-1  
0-18
```

```
4 | 0.02 | google's third-quarter beats as ad volume grows, stock flirts $1,000 level | True 201  
3-10-18
```

```
5 | 0.16 |      schlumberger, baker top estimates with global drilling | False 2013-1  
0-18
```

```
6 | 0.02 |      u.s. data backlog a boon for computer-driven trading | False 2013-1  
0-18
```

```
7 | 0.01 |      fed to release delayed report on industrial output on october 28 | False 2013-1  
0-18
```

```
8 | 0.01 |      data delay adds wrinkle to u.s. inflation bond sales | False 2013-1  
0-18
```

```
9 | 0.08 |      as stock splits wane, more may follow google to $1,000 | True 2013-10  
-18
```

```
10 | 0.00 |      global stocks gain, dollar falls as fed seen staying course | False 2013-1  
0-18
```

```
11 | 0.09 |      s&p breaks record, google's stock tops $1,000 on earnings | False 2013-1  
0-18
```

```
12 | 0.30 |      google shares break $1,000 barrier as mobile pays off | True 2013-10  
-18
```

```
13 | 0.00 |      u.s. economy bruised by fiscal fight: treasury secretary | False 2013-1  
0-20
```

```
14 | 0.00 |      despite debt drama, u.s. still outshining europe | False 2013-1  
0-20
```

```
15 | 0.01 |      aussie shares hit five-year high, dollar near eight-month low | False 2013-1  
0-20
```

